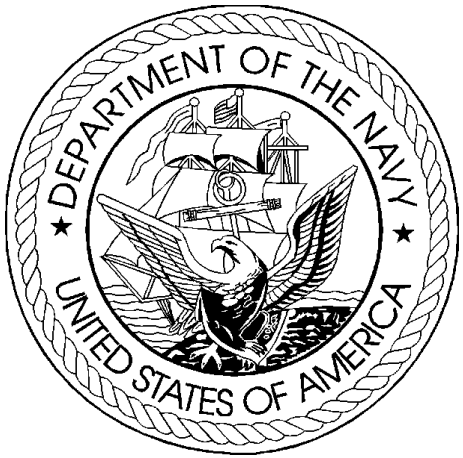
DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2004/2005
BIENNIAL BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2003

WEAPONS PROCRUREMENT, NAVY

Department of the Navy
FY 2004/2005 Procurement Program
SUMMARY
($ IN MILLIONS)

Exhibit P-1
DATE: February 2003

Appropriation: Weapons Procurement, Navy

ACTIVITY	FY 02	FY 03	FY 04	FY 05
1. Ballistic Missiles	536.2	576.0	676.5	772.1
2. Other Missiles	637.7	967.7	1,016.1	1,365.5
3. Torpedoes and Related Equipment	116.4	149.5	163.9	194.9
4. Other Weapons	74.1	85.5	86.6	187.3
6. Spares and Repair Parts	48.8	54.1	48.7	54.2
	1,413.1	1,832.7	1,991.8	2,574.0

NOTE: There is an error on the 30 Sep 1002 Execution Report for FY 2002. The P-1 reflects the correct line item distributions.

Department of the Navy

FY 2004/2005 Procurement Program — Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy — DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
	BUDGET ACTIVITY 01: Ballistic Missiles											
	Ballistic Missiles											
1	1150 Trident II	A	57,335,667	12	540.1	12	171.5	12	688.0	5	818.9	U
	Less: Advance Procurement (PY)				-13.9		-13.2		-12.8		-48.1	
					526.2		158.2		675.2		770.8	
2	1150 Trident II	A										U
	Advance Procurement (CY)				8.7		-		-		-	U
	(FY 2002 for 2003) (MEMO)				8.7		-		-		-	
	Modification Of Missiles											
3	1250 TRIDENT II Mods	A			-		416.4		-		-	U
	Support Equipment And Facilities											
4	1350 Missile Industrial Facilities	A			1.3		1.3		1.3		1.3	U
	TOTAL Ballistic Missiles				536.2		576.0		676.5		772.1	

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
	BUDGET ACTIVITY 02: Other Missiles											
	Strategic Missiles											
5	2101 Tomahawk	A	1,039,655	25	73.0	167	244.1	267	277.6	218	192.0	U
6	2307 ESSM		1,074,038	13	41.3	23	42.7	105	112.8	111	102.6	U
	Tactical Missiles											
7	2206 AMRAAM	A	710,340	55	36.5	100	50.0	53	37.6	46	36.1	U
8	2209 Sidewinder	A	214,479	105	25.8	284	52.2	167	35.8	162	35.6	U
9	2230 JSOW	B	322,730		-	165	101.3	429	138.5	463	137.1	U
10	2231 SLAM-ER		644,583	30	25.7	120	82.2	84	54.1	90	61.6	U
11	2234 Standard Missile	A	1,977,440	96	155.4	93	153.4	75	148.3	75	150.7	U
12	2242 RAM	A	536,833	90	46.4	90	64.1	90	48.3	90	47.5	U
13	2280 Aerial Targets	A			57.8		69.0		70.7		103.7	U
14	2285 Drones and Decoys	A			13.8		13.7		-		-	U
15	2290 Other Missile Support	A			9.6		11.8		10.9		10.5	U
	Modification Of Missiles											
16	2315 Sidewinder Mods	A			.8		.6		-		-	U
17	2327 HARM Mods	A			-		4.9		7.8		8.0	U
18	2356 Standard Missiles Mods	A			34.9		55.1		50.8		51.9	U
	Support Equipment And Facilities											
19	2420 Weapons Industrial Facilities	A			35.7		17.3		7.4		4.1	U
20	2433 Fleet Satellite Comm Follow-O	A			76.8		-		-		362.3	U
	Ordnance Support Equipment											

Department of the Navy

FY 2004/2005 Procurement Program Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
21	2500 Ordnance Support Equipment	A			4.2		5.3		15.4		61.8	U
TOTAL	Other Missiles				637.7		967.7		1,016.1		1,365.5	

Department of the Navy

FY 2004/2005 Procurement Program Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
	BUDGET ACTIVITY 03: Torpedoes and Related Equipment											
	Torpedoes And Related Equipment											
22	3141 ASW Targets	A			9.9		4.2		25.5		28.4	U
	Mod Of Torpedoes And Related Equip											
23	3215 MK-46 Torpedo Mods	A			9.8		38.0		34.2		61.6	U
24	3225 MK-48 Torpedo ADCAP Mods	A			41.6		60.9		60.4		61.9	U
25	3231 Quickstrike Mine	B			3.8		2.0		3.2		3.0	U
	Support Equipment											
26	3301 Torpedo Support Equipment	A			29.5		24.7		24.9		23.8	U
27	3302 ASW Range Support	A			19.0		16.9		12.8		12.9	U
	Destination Transportation											
28	2410 First Destination Transportat	A			2.8		2.7		2.8		3.1	U
	TOTAL Torpedoes and Related Equipment				116.4		149.5		163.9		194.9	

Department of the Navy

FY 2004/2005 Procurement Program Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
	BUDGET ACTIVITY 04: Other Weapons											
	Guns And Gun Mounts											
29	4129 Small Arms and Weapons	A			.9		6.7		4.2		2.2	U
30	4206 COAST GUARD WEAPONS	A			-		-		-		5.4	U
31	4225 Airborne Mine Neutralization				-		.7		-		-	U
	Modification Of Guns And Gun Mounts											
32	4205 CIWS Mods	A			43.7		57.7		41.4		144.5	U
33	4210 5/54 Gun Mount Mods	A			26.4		-		-		-	U
34	4217 Gun Mount Mods				-		11.5		27.3		26.4	U
	Other											
35	4222 Pioneer	A			-		8.8		13.6		8.8	U
36	4500 Cancelled Account Adjustments	A			2.3		-		-		-	U
37	4602 Cancelled Account Adj (89)				.8		-		-		-	U
	TOTAL Other Weapons				74.1		85.5		86.6		187.3	

Department of the Navy

FY 2004/2005 Procurement Program Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	S E C
BUDGET ACTIVITY 06: Spares and Repair Parts												
Spares and Repair Parts												
38 6120	Spares and Repair Parts	A			48.8		54.1		48.7		54.2	U
TOTAL	Spares and Repair Parts				48.8		54.1		48.7		54.2	

Department of the Navy

FY 2004/2005 Procurement Program Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy DATE: February 2003

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2004 UNIT COST	TOA, $ IN MILLIONS								S E C
				FY 2002 QUANTITY	FY 2002 COST	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	
TOTAL	Weapons Procurement, Navy				1,413.1		1,832.7		1,991.8		2,574.0	

Fiscal Year 2004/2005 Budget Estimates
Budget Appendix Extract Language

WEAPONS PROCUREMENT, NAVY (WPN)

For construction, procurement, production, modification, and modernization of missiles, torpedoes, other weapons, and related support equipment including spare parts, and accessories therefor; expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, [$1,868,517,000] *$1,991,821,000*, to remain available for obligation until September 30, [2005] *2006. (10 U.S.C. 5013, 5062; Department of Defense Appropriations Act, 2003.)*

BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2003

APPROPRIATION/BUDGET ACTIVITY
WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES

P-1 ITEM NOMENCLATURE
TRIDENT II MISSILE UGM-133A (D-5)
TRIDENT II MODIFICATIONS (FY 2003)

$ in Millions	Prior Years	FY 02	FY 03	FY 04	FY 05	FY06	FY07	FY08	FY09	To Complete	Total Program
QUANTITY	384	12	12	12	5			12	24	79	540
End Cost	$14,084.0	$581.8	$701.9	$828.5	$820.6	$928.7	$927.8	$1,044.1	$1,352.4	$7,344.2	$28,614.0
Less: Prior Year Adv. Proc.	($1,625.2)	($55.6)	($127.3)	($153.3)	($49.8)	$0.0	$0.0	$0.0	$0.0	($479.1)	($2,490.3)
Less: Prior Year Procurement	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	($220.2)	($995.2)	($1,215.4)
Full Funding TRIDENT II	$12,458.8	$526.2	$158.2	$675.2	$770.8	$928.7	$927.8	$1,044.1	$1,132.2	$5,869.9	$24,908.3
TRIDENT II Modifications			$416.4								
Plus: Current Year Adv. Proc.	$2,481.6	$8.7	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$2,490.3
Plus: Initial Spares	$35.4	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$35.4
Total New Obligational Authority	$14,975.8	$534.9	$574.6	$675.2	$770.8	$928.7	$927.8	$1,044.1	$1,132.2	$5,869.9	$27,434.0
Missile Flyaway Unit Cost	$15.1	$23.5	$23.8	$24.2	$24.6	$0.0	$0.0	$32.3	$27.4	$26.9	$18.4

The TRIDENT II missile is carried on OHIO CLASS Fleet Ballistic Missile Submarines, ensuring that the United States continues to maintain a highly survivable strategic deterrent well into the 21st century. Deployment of the TRIDENT II missile (1) enhances Fleet Ballistic Missile Submarine survivability by increasing Sea Launched Ballistic Missile range at full payload to exploit the total patrol area available to the TRIDENT submarine, (2) minimizes total weapon system costs by increasing Sea Launched Ballistic Missile payload to the level permitted by the size of the TRIDENT submarine launch tube, thereby allowing mission capability to be achieved with fewer submarines, and (3) balances the Triad by adding efficient hard target kill capability to the Sea Launched Ballistic Missile.

Funding in this line is required to support the procurement of TRIDENT II missiles, initial production of which commenced in FY 1987 and supported a TRIDENT II missile Initial Operational Capability (IOC) in March 1990. Beginning in FY 2001, funds are included for D-5 life extension to ensure that Strategic Weapons System life matches the extended Ohio-class hull life.

The FY 2004 request of $675.2 million includes $137.4 million to complete production of 12 FY2004-authorized missiles, $304.6 million for D-5 life extension to sustain production of D-5 missile motors and other critical components, and $233.2 million for program and production support costs, including flight test instrumentation, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and equipment procurements associated with establishing a TRIDENT II capability at the Strategic Weapons Facility, Pacific (SWFPAC) at Bangor, WA. Funding provides for a 14 SSBN TRIDENT II program, which assumes the backfit of four C-4 boats to the D-5 configuration. The D-5 life extension funding request procures D-5 missile motors and other critical components required to support the extended 45-year SSBN hull life and sustains the redesign of the guidance system and missile electronics, which must be replaced to support the extended service life.

The FY 2005 request of $770.8 million includes $73.3 million to complete production of 5 FY2005-authorized missiles, $431.4 million for D-5 life extension to sustain production of D-5 missile motors and other critical components, and $266.1 million for program and production support costs, including flight test instrumentation, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and equipment procurements associated with establishing a TRIDENT II capability at the Strategic Weapons Facility, Pacific (SWFPAC) at Bangor, WA. Funding provides for a 14 SSBN TRIDENT II program, which assumes the backfit of four C-4 boats to the D-5 configuration. The D-5 life extension funding request procures D-5 missile motors and other critical components required to support the extended 45-year SSBN hull life and sustains the redesign of the guidance system and missile electronics, which must be replaced to support the extended service life.

The Navy requests the addition of specific language in the FY 2004 DoD Appropriations Bill as follows: "The Weapons Procurement, Navy appropriation includes $9.776 million of cash payments to be deposited in the UK Trust Fund under the terms of the 28 July 1998 Secretary of Defense Memorandum of Understanding (MOU) with the United Kingdom." The financial addendum to the MOU specifies annual payments totaling $50.3 million for FY 2001 - FY 2005 subject to Congressional authorization and appropriation. These funds purchase D-5 missile components required for the U.S. program and are included within the full funding request for airframe and motor flyaway costs.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1	B. UGM-133A TRIDENT II (D-5) MISSILE (31DL) TRIDENT II MODIFICATIONS (31DM)	C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA	D. FEBRUARY 2003

WEAPON SYSTEM / COST ELEMENTS	Ident. Code	FY 02 Unit cost	FY 02 Qty	FY 02 TOTAL COST	FY 03 Unit cost	FY 03 Qty	FY 03 TOTAL COST	FY04 Unit cost	FY04 Qty	FY04 TOTAL COST	FY05 Unit cost	FY05 Qty	FY05 TOTAL COST
MISSILE END COST							1/			1/			1/
1 AIRFRAME & MOTOR FLYAWAY COST		**23,500**	**12**	282,000	**23,799**	**12**	285,586	**24,225**	**12**	290,700	**24,625**	**5**	123,125
2 GUIDANCE FLYAWAY COST				0			0			0			0
3 SUBTOTAL MISSILE AND GUIDANCE FLYAWAY COST				282,000			285,586			290,700			123,125
LESS: PRIOR YEAR ADVANCE PROCUREMENT				(55,624)			(127,337)			(153,268)			(49,795)
4 SUBTOTAL MISSILE AND GUIDANCE END COST NEW OBLIGATIONAL AUTHORITY (NOA)				226,376			158,249			137,432			73,330
1/ Includes payments for FY 2002 through FY 2005 of $9469, $17,067, $9776 and $8854 to the UK Trust Fund.													
TRIDENT II MODIFICATIONS													
A. SUPPORT COSTS				181,090			178,530			233,177			266,076
5 WARHEAD COMPONENTS				19,100			19,300			53,800			69,900
6 SPECIAL PURPOSE INSTRUMENTATION				37,850			60,350			50,000			57,900
7 SPECIAL PURPOSE TOOLING & TEST EQUIPMENT				16,400			16,300			18,900			19,000
8 ARMS CONTROL				2,900			2,300			0			0
9 CONTAINERS				40			40			40			40
10 SYSTEM INTEGRATION & PLANNING				13,700			13,700			13,900			14,200
11 SWFLANT PRODUCTION SUPPORT				12,500			12,550			12,800			31,500
12 SUPPORTABILITY MODS				8,250			9,300			31,400			35,300
13 GUIDANCE PARTS PROCUREMENT				6,430			6,700			6,900			7,100
14 SWFPAC PRODUCTION SUPPORT				14,100			17,440			21,637			13,786
15 EOP MISSILE AND GUIDANCE COSTS				37,520			7,800			6,800			0
16 PIGA				12,300			12,750			17,000			17,350
B. D5 LIFE EXTENSION				118,700			237,900			304,600			431,400
17 MISSILE HARDWARE				57,100			171,200			193,300			263,100
18 REDESIGN				0			55,300			109,600			163,400
19 PRODUCTION SUPPORT				61,600			11,400			1,700			4,900
SUBTOTAL MODS (D-5 BUDGET LINE ITEM)				299,790			--0--			537,777			697,476
SUBTOTAL MODS (MODIFICATION BUDGET LINE ITEM)				--0--			416,430			--0--			--0--
CURRENT YEAR FULL FUNDING				**526,166**			**574,679**			**675,209**			**770,806**
PLUS: CURRENT YEAR ADVANCE PROCUREMENT				**8,727**			**0**			**0**			**0**
TOTAL NEW OBLIGATIONAL AUTHORITY				**534,893**			**574,679**			**675,209**			**770,806**

P-1 Shopping List Item No. **1** **Page No.** **2**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: FEBRUARY 2003

B. WEAPONS PROCUREMENT NAVY
BUDGET ACTIVITY 1

P-1 ITEM NOMENCLATURE:
TRIDENT II MISSILE UGM-133A (D-5)

COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. TRIDENT II MSL.										
FY 2002	LOCKHEED MARTIN MISSILES AND SPACE CO. (LMMS) SUNNYVALE, CA	SS/CPIF	STRATEGIC SYSTEMS PROGRAMS (SSP)	10/01	10/03	12	23,500	YES	NO	
FY 2003	LMMS	SS/CPIF	SSP	01/03	10/04	12	23,799	YES	NO	
FY 2004	LMMS	SS/CPIF	SSP	10/03	10/05	12	24,225	YES	NO	
FY 2005	LMMS	SS/CPIF	SSP	10/04	10/06	5	24,625	YES	NO	

D. REMARKS

FY 01 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE:
TRIDENT II MISSILE UGM - 133A (D-5)

DATE: FEBRUARY 2003

ITEM/MANUFACTURER PROCUREMENT YEAR	SERV	PROC QTY	ACCEP. PRIOR TO 1 OCT	BALANCE DUE AS OF 1 OCT	FISCAL YEAR 2004												FISCAL YEAR 2005												LATER
					CALENDAR YEAR 2004												CALENDAR YEAR 2005												
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TRIDENT II MISSILE																													
FY2002		12	-	12	1	1	1	1	1	1	1	1	1	1	1	1													0
FY2003		12	-	12													1	1	1	1	1	1	1	1	1	1	1	1	0
FY 2004		12	-	12																									12
FY 2005		5	-	5																									5
FY 2008-13		115	-	115																									115
TOTAL		156	0	156	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	132
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MANUFACTURER'S NAME AND LOCATION	PRODUCTION RATES			REACHED	PRODUCTION LEAD TIME				REMARKS
	MINIMUM SUST.	1-8-5	MAXIMUM	D +		ADMIN LEADTIME PRIOR 1 OCT	AFTER 1 OCT	MANU FACTURING TIME	TOTAL AFTER 1 OCT	
LOCKHEED MARTIN MISSILES AND SPACE COMPANY, SUNNYVALE, CA	12 PER YR	12 PER YR	12 PER YR		INITIAL 1987	31 MO	5 MO	30 MO	35 MO	
					REORDER 1989	9 MO		24 MO	24 MO	

DD FORM 2445, JUL 87

P-1 SHOPPING LIST
ITEM NO. 1 PAGE NO. 4

EXHIBIT P-21 PRODUCTION SCHEDULE

FY 01 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE:
TRIDENT II MISSILE UGM - 133A (D-5)

DATE: FEBRUARY 2003

ITEM/MANUFACTURER PROCUREMENT YEAR	FISCAL YEAR 2006													FISCAL YEAR 2007												FISCAL YEAR 2008												LATER
	CALENDAR YEAR 2006													CALENDAR YEAR 2007												CALENDAR YEAR 2008												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TRIDENT II MISSILE																																					
FY 2004	1	1	1	1	1	1	1	1	1	1	1	1																									0
FY 2005													1	1	1	1	1																				0
FY 2008-13																																					115
TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

REMARKS

DD FORM 2445, JUL 87

P-1 SHOPPING LIST
ITEM NO. 1 PAGE NO. 5

EXHIBIT P-21 PRODUCTION SCHEDULE

FY04 PRESIDENTS BUDGET

TRIDENT II PROCUREMENT ANNEX

FEBUARY 2003

	2002	2003	2004	2005	2006	2007	2008	2009	TO COMP
WEAPON SYSTEM COST	581,790	702,016	828,477	820,601	928,694	927,752	1,044,125	1,132,212	6,349,013
ADVANCE PROCUREMENT (PY)	(55,624)	(127,337)	(153,268)	(49,795)	0	0	0	0	(479,113)
CURRENT YEAR PROGRAM	526,166	574,679	675,209	770,806	928,694	927,752	1,044,125	1,132,212	5,869,900
ADVANCE PROCUREMENT (CY)	8,727	0	0	0	0	0	0	0	0
TOTAL	534,893	574,679	675,209	770,806	928,694	927,752	1,044,125	1,132,212	5,869,900

FY OF FUNDING	$	FY02	FY03	FY04	FY05	FY06	FY07	TO COMP
1985	24,400	0	0	0	0	0	0	212
1986	235,713	0	0	0	0	0	0	0
1987	264,385	0	0	0	0	0	0	0
1988	309,578	1,030	1,030	618	143	0	0	65,863
1989	228,063	600	600	700	250	0	0	59,113
1990	216,131	500	500	600	202	0	0	75,129
1991	176,665	300	300	400	107	0	0	50,220
1992	218,000	600	600	600	214	0	0	104,146
1993	223,000	500	500	500	178	0	0	68,572
1994	116,262	500	500	500	178	0	0	55,104
1995	53,376	32,745	6,745	245	85	0	0	154
1996	185,379	800	99,200	57,079	300	0	0	600
1997	57,934	0	0	47,199	0	0	0	0
1998	49,533	2,000	0	3,233	29,500	0	0	0
1999	52,625	2,150	4,150	28,775	0	0	0	0
2000	51,260	1,585	1,585	9,919	17,438	0	0	0
2001	19,314	12,314	2,900	2,900	1,200	0	0	0
2002	8,727		8,727	0	0	0	0	0
2003	0			0	0	0	0	0
2004	0				0	0	0	0
TOTAL	2,490,345	55,624	127,337	153,268	49,795	0	0	479,113

BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 2003
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES	**P-1 ITEM NOMENCLATURE** MISSILE INDUSTRIAL FACILITIES

	Prior Years	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	N/A	$1.3	$1.3	$1.3	$1.3	$1.4	$1.4	$1.4	$1.4	N/A	N/A
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions)	N/A	$1.3	$1.3	$1.3	$1.3	$1.4	$1.4	$1.4	$1.4	N/A	N/A
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Funding for Missile Industrial Facilities provides for capital maintenance projects at Navy-owned Naval Industrial Reserve Ordnance Plants (NIROPS) at Sunnyvale and Santa Cruz, California, and Bacchus, Utah, in support of the Fleet Ballistic Missile program.

Projects planned in FY 2004 and FY 2005 include additions and modifications to, and rehabilitation of, civil works, non-severable equipment, and real property. Among those projects are upgrades and improvements such as upgrading building electrical systems, replacing conductive floors, replacing insulation, replacing water and steam piping, paving roads and parking areas and painting buildings.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1	B. MISSILE INDUSTRIAL FACILITIES (31DG)	C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA	FEBRUARY 2003

WEAPON SYSTEM COST ELEMENTS	Ident. Code	FY02 Unit cost	FY02 Qty	TOTAL COST	FY03 Unit cost	FY03 Qty	TOTAL COST	FY04 Unit cost	FY04 Qty	TOTAL COST	FY05 Unit cost	FY05 Qty	TOTAL COST
CAPITAL MAINTENANCE				1,272			1,293			1,305			1,338
TOTAL MISSILE INDUSTRIAL FACILITIES				1,272			1,293			1,305			1,338

P-1 Shopping List Item No. 4

Page No. 2

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy

P-1 ITEM NOMENCLATURE
Tomahawk (MYP)

Program Element for Code B Items:
BA2/Other Missiles **P.E. #0204229N**

Other Related Program Elements

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	4,201	B	25	167	267	218	422	406	471	410		6,587
Gross P-1 Cost ($M)	$7,939.923		$73.021	$244.054	$227.588	$199.211	$360.771	$390.785	$455.523	$426.877	$0.000	$10,317.753
EOQ Credit						-$7.185	-$13.909	-$13.382	-$15.524			-$50.000
Net P-1 Cost ($M)	$7,939.923		$73.021	$244.054	$227.588	$192.026	$346.862	$377.403	$439.999	$426.877	$0.000	$10,267.753
Adv Proc/EOQ ($M)					$50.000							$50.000
Wpn Sys Cost ($M)	$7,939.923		$73.021	$244.054	$277.588	$192.026	$346.862	$377.403	$439.999	$426.877	$0.000	$10,317.753
Initial Spares ($M)	$313.518											$313.518
Proc Cost ($M)	$8,253.441		$73.021	$244.054	$277.588	$192.026	$346.862	$377.403	$439.999	$426.877	$0.000	$10,631.271
Unit Cost ($M)	$1.965		$2.921	$1.461	$1.040	$0.881	$0.822	$0.930	$0.934	$1.041	$0.000	$1.614

Description:
Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of the following variants: (1) RGM/UGM -109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser; (5) RGM/UGM-109E, Tactical Tomahawk. The Land Attack Surface Launch Nuclear and Anti-ship versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

Production of the Tactical Tomahawk missile began with Low Rate Initial Production (LRIP) buys of 25 in FY2002 and 167 in FY2003. Full rate production will commence in FY2004. FY2004-FY2008 unit cost based on approval of multi-year procurement (MYP). The contractor's production offer of $569 (FY99$) level unit price, plus Government incentives and award fees are factored into the multi-year pricing. If MYP is not approved, additional funds will be required to maintain procurement quantity.

Basis for FY 2004 Request:
FY2004 procures 267 Tactical Tomahawk missiles with support. FY2004 EOQ supports economic order quantity procurements for the MYP.

Characteristics and dimensions (approximate)
Weight (with booster and capsule) (UGM-109): 4,300 pounds
Weight (with booster and canister) (RGM-109): 4,000 pounds
Length (with booster): 20.5 feet
Wing Span: 8.6 feet
Cruise Speed: High Subsonic

Contractor: Raytheon Missiles Systems Company

Non Add:
FY2002 Defense Emergency Response Fund (DERF) - $350 million, 454 missiles remanufactured to the Block III configuration.

WEAPONS PROCUREMENT, NAVY
FY 2004/2005 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Thousands)

Missile Nomenclature & Popular Name: TOMAHAWK (J2EL)(PEO(W)) (BLI: 210100) (MYP) Date: February 2003

Cost Elements	Prior Years Total Cost	FY 2002 Quantity	FY 2002 Unit Cost	FY 2002 Total Cost	FY 2003 Quantity	FY 2003 Unit Cost	FY 2003 Total Cost	FY 2004 Quantity	FY 2004 Unit Cost	FY 2004 Total Cost	FY 2005 Quantity	FY 2005 Unit Cost	FY 2005 Total Cost
Missile Hardware													
Previous Tomahawk Production	5,611,035												
Tactical Tomahawk		25	1,412	35,298	167	1,250	208,750	267	661	176,487	218	672	146,496
Remanufacture (Block III)	592,217												
Subtotal Hardware	6,203,252	25		35,298	167		208,750	267		176,487	218		146,496
Non-Recurrring Tooling				24,500			13,590						
Other Hardware													
CCLS Submarine Capsules		7	137	962	53	140	7,420	92	197	18,155	73	267	19,486
Canisters		18	47	846	114	50	5,730	175	53	9,204	145	53	7,754
Subtotal Other Hardware		25		1,808	167		13,150	267		27,359	218		27,240
Production Support													
Product Improvement	378,947												
Systems Engineering	278,645			4,558			3,420			9,857			10,576
Production Engineering	604,201			3,856			2,892			9,478			10,170
Subtotal Production Support	1,261,793			8,414			6,312			19,335			20,746
Total Flyaway Cost	7,465,045			70,020			241,802			223,181			194,482
Other Support Costs													
Theater Mission Planning Center	255,044												
Support Equipment	113,281			1,073			766			1,498			1,608
Training Equipment	78,019			1,463			1,081			2,116			2,270
Documentation	28,534			465			405			793			851
Subtotal Other Support Costs	474,878			3,001			2,252			4,407			4,729
Total Support Costs	474,878			3,001			2,252			4,407			4,729
Gross P-1	7,939,923			73,021			244,054			227,588			199,211
EOQ Credit													-7,185
Net P-1	7,939,923			73,021			244,054			227,588			192,026
EOQ										50,000			
Weapon Systems Cost	7,939,923			73,021			244,054			277,588			192,026
Initial Spares	313,518												
Total Program Cost	8,253,441		2,921	73,021		1,461	244,054		1,040	277,588		881	192,026
Non Add: FY 2002 DERF													
Tomahawk Remanufacture		454	771	350,000									

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

Weapon System: **TOMAHAWK**

A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy / BA2/Other Missiles

C. P-1 ITEM NOMENCLATURE: Tomahawk (PEO(W)) (BLI: 210100) (MYP)

SUBHEAD: J2EL

COST ELEMENT/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
TACTOM All-Up-Round										
01000/FY02	25	1,412	NAVAIR	Jun 01	SS/FPI	Raytheon Missile Systems Co., Tucson, AZ	Oct 02	May 04	YES	N/A
01000/FY03	167	1,250	NAVAIR	Jun 01	SS/FPI	Raytheon Missile Systems Co., Tucson, AZ	Jan 03	Oct 04	YES	N/A
01000/FY04*	267	661	NAVAIR	Mar 03	SS/FP (MYP)	Raytheon Missile Systems Co., Tucson, AZ	Jun 04	Sep 05	YES	N/A
01000/FY04 for FY05-FY08 EOQ			NAVAIR	Mar 03	AAC/MYP	Raytheon Missile Systems Co, Tucson, AZ	Jun 04		YES	N/A
01000/FY05*	218	672	NAVAIR	Mar 03	SS/FP (MYP)	Raytheon Missile Systems Co., Tucson, AZ	Jan 05	Jul 06	YES	N/A
TLAM REMAN										
FY 2002 DERF	454	771	NAVAIR	Dec 01	SS/FP	Raytheon Missile Systems Co., Tucson, AZ	Dec 01	Aug 03	YES	N/A

D. Remarks: *Quantity based upon Tactical Tomahawk Multi-year Procurement in FY2004-FY2008.

FY 2004/2005 DEPARTMENT OF THE NAVY BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**			Weapon System **TOMAHAWK**		P-1 ITEM NOMENCLATURE **Tomahawk (PEO(W))(BLI: 210100) (MYP)**
		Production Rate		Procurement Leadtimes	

Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Tomahawk (FY04)	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	26	42	7	9	16		32	Each

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2002		25	0	25													A											25
Block IV Tomahawk (TACTOM)	2003		167	0	167																A								167
*FY02-Remanufacture of Existing TLAM Missiles into Block III Config	DERF		454	0	454			A											1	4							18	24	407

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2002		25	0	25								2	3	4	4	4	4	4										0
Block IV Tomahawk (TACTOM)	2003		167	0	167													3	5	10	12	14	17	19	19	21	23	24		0
*FY02-Remanufacture of Existing TLAM Missiles into Block III Config	DERF		454	47	407	30	32	35	35	35	34	35	35	34	34	29	19	20												0
Block IV Tomahawk (TACTOM)	2004		267	0	267									A														26	241
Block IV Tomahawk (TACTOM)	2005		218	0	218																A								218

Remarks: *Non Add: FY 2002 Defense Emergency Response Funding (DERF). REMAN contract incentivizes early delivery. Actual deliveries to date are annotated along with the remaining contracted delivery schedule.

FY 2004/2005 DEPARTMENT OF THE NAVY BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**			Weapon System **TOMAHAWK**		P-1 ITEM NOMENCLATURE **Tomahawk (PEO(W))(BLI: 210100) (MYP)**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Tomahawk (FY04)	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	26	42	7	9	16		32	Each

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007												BAL
						2005			CALENDAR YEAR 2006												CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2004		267	26	241	25	25	24	24	24	24	24	24	25	22															0
Block IV Tomahawk (TACTOM)	2005		218	0	218										3	27	27	29	29	34	34	35								0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009												BAL
						2007			CALENDAR YEAR 2008												CALENDAR YEAR 2009										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

Exhibit MYP-1, Multiyear Procurement Criteria
Program: Tactical Tomahawk

1. Multiyear Procurement Description:

This proposed multiyear procurement (MYP) covers the purchase of 1784 Block IV Tactical Tomahawk missiles in FY 2004 through FY 2008 under a single five-year fixed-price type contract. These missiles constitute the first five years of Full Rate Production (FRP) of Tactical Tomahawk, following two years of Low Rate Initial Production (LRIP) in FY 2002 and FY 2003, during which 192 Tactical Tomahawk missiles will be produced. This MYP strategy has been structured to achieve significant savings while providing increased operational responsiveness, flexibility and reliability.

The MYP up front investment costs for non-recurring start-up expenses were funded in FY 2002 and FY 2003 as part of the LRIP effort to support planned FRP in FY 2004. Advanced procurement in the amount of $50M is provided as part of the FY 2004 budget submission to cover economic order quantities. As compared to annualized procurements, this multiyear procurement will achieve $135M of savings over the five-year period. This is equivalent to 9.9% of the total annualized cost to procure the same quantity.

The MYP contract will set a target quantity for each fiscal year of the contract, but allow for a quantity range of missiles in each fiscal year to allow the Government the flexibility to meet emergent requirements for more missiles, including those for foreign military sales customers, while maintaining the MYP and the savings established in the baseline. This flexibility can also accommodate missile deletions without forgoing MYP benefits, but deletions may erode some of the savings due to a reduction in economies of scale and the amortization of non-recurring efforts, which will have already occurred.

2. Benefits to the Government:

a. Substantial Savings:

Implementation of this MYP will yield significant opportunity for cost avoidance through the five-year term of this contract. The total cost savings/avoidance for FY 2004 through FY 2008 associated with this contract are estimated to be $135M (TY$). The cost savings will be generated as a result of Economic Order Quantity (EOQ) and investment in program specific capital equipment and/or processes that would not meet the contractor's Internal Rate of Return objectives under annualized procurements. Some examples include:

Williams International will level-load procurement of cruise missile engine components, such as the pyro igniters, which will allow for the development of a sustainable, efficient production flow process, including the optimization of component acceptance testing, at all tiers of the engine supply chain.

Economic Order Quantity purchases of rocket motor sub-components such as the arm fire device, nozzle throat components, and motor casing forgings.

Administrative costs will be reduced due to there being one proposal, negotiation and contract award process instead of five consecutive single-year contracting actions. Cost reductions will also be realized since the prime contractor can enter into one five-year contract with its subcontractors, at all tiers, instead of five separate actions. The prime contractor will also experience administrative cost reductions in the production planning processes since they will only be required to perform that process once, instead of five times under an annual contracting scenario.

Additionally, given a five-year contract, suppliers will have a greater total business base and stability than would otherwise be the case. As such, they will have added incentive and more opportunity to identify innovative processes and justify capital investments necessary to reduce costs.

b. Stability of Requirement:

The requirement for the Block IV Tactical Tomahawk All Up Round is based on the Tomahawk Baseline IV Operational Requirements Document (ORD) approved 1 Feb 00. The ORD has been updated to reflect the evolution of operational requirements including increased system flexibility to support receipt of missile/mission status, enroute retargeting of the missile to alternate preplanned and preloaded aimpoints or missions via third party command, reduced system response time to enable engagement of emerging and relocatable targets, and improved lethality against a wider target set. The Key Performance Parameters identified in the ORD have remained stable from program inception and are anticipated to remain stable through the production period. These performance parameters have been flowed down and in some areas enhanced in the missile level specification required under the development and production contracts.

As a critical first strike weapon, Tactical Tomahawk production is of operational significance to the Fleet Commanders who consistently list Tomahawk inventory as one of their top fleet issues. The planned Tactical Tomahawk program contained in the budget will significantly improve inventory posture. The currently fielded Block III missile went out of production in 1998, and through emergency supplemental funds in FY99 and FY02, all remaining Block II and some older TASM and Surface-N missiles will be remanufactured to Block III capability. Only 304 of the older TASM and Surface-N missiles remain as potential remanufacture candidates, and these represent the least economically feasible pool for remanufacture. Block IV Tactical Tomahawk production is the best candidate for increasing the inventory of Tomahawk Missiles and will provide more capability at a quicker rate than another Reman program could.

c. Stability of Funding:

The Navy has demonstrated its commitment to a stable funding stream for the Tactical Tomahawk multiyear through every step of the PPBS process. The use of Tomahawk assets in recent operations has further reduced the inventory of Tomahawk assets to support future, deep-strike, land attack missions. Congress has expressed the desire to enter Tactical Tomahawk production at the earliest opportunity by providing additional funding in FY02 (Congressional Add) for the procurement of non-recurring engineering/special tooling and test equipment to realize Full Rate Production levels as soon as possible. In addition, the Navy has provided funding in FY03 for the remaining non-recurring costs.

d. Stable Design:

The Tactical Tomahawk has undergone a five-year Engineering & Manufacturing Development (E&MD) phase, which is currently 98% complete. This phase included significant component level testing, AUR level qualification testing, system level integration testing, Functional Ground Tests and two Contractor Development Test Flights (DT-0 and DT-1) of the All-Up-Round. The DT-0 test flight was successfully conducted in Aug 02. The missile flew a fully guided 550-mile flight using global positioning system (GPS) and digital scene matching area correlation (DSMAC) navigation updates successfully impacting the target well within accuracy requirements. Additionally, the DT-0 test demonstrated two capabilities unique to this weapons system - in flight retargeting and satellite communication. The DT-1 test flight in Nov 02 was similarly successful, consisting of a subsurface launch, a 780-mile profile followed by successful target impact. Both test flights successfully demonstrated all required test objectives. The technical success and design maturity demonstrated by the DT-0 and DT-1 tests allowed for the initiation of the Low-Rate Initial Production I (LRIP-I) program in Oct 02 and the LRIP-2 option award in Jan 03, respectively. The Tactical Tomahawk AUR is meeting and in most areas exceeding its design performance requirements.

The program will complete Government Technical Evaluation (TECHEVAL) in FY03 and Operational Evaluation (OPEVAL) testing in 2nd quarter FY04 followed by Initial Operational Capability (IOC). The FRP decision, Milestone III, is scheduled for 3rd quarter of FY04 with the multiyear procurement contract to be awarded immediately following.

In conclusion, Tactical Tomahawk has completed its design development and is meeting and exceeding all design performance requirements. Government testing activities will provide the final design interface verification assessment to ensure that the complete weapon system design configuration is stable prior to commencement of full rate production. The contractor's technical success, production and experience from prior Block Tomahawks, and the substantial knowledge gained over the Tactical Tomahawk's test program, provide for a technically mature design with which to enter into a MYP.

e. Realistic Cost Estimate:

The Program Office in conjunction with the contractor, the NAVAIR Cost Analysis group (AIR-4.2), and NAVAIR contracts (AIR-2.4) has participated in the formulation of a Common Cost Model. The Navy Center for Cost Analysis has an advisory position on this team. The Common Cost Model is based upon estimated costs to the Prime contractor based on invoices, purchase orders, sub-contractor proposed prices, and the material and labor costs from LRIP. This model was used to derive both projected Multi-year and Annualized costs by accounting for differences in sub-contractor proposals for multi-year versus stand-alone contracts. In addition to this Common Cost Model, NCCA formulated a projected unit cost based on parametric analysis. The estimated unit cost for Tactical Tomahawk in FRP based on the Common Cost Model is within the range predicted by NCCA.

f. National Security:

The Quadrennial Defense Review, Defense Planning Guidance and Navy Non Nuclear Ordinance Requirement have set the requirements for Tomahawk significantly above current inventory levels. In support of National Security requirements and future objectives, the establishment of a sustaining industrial base with surge capability for this critical first strike weapon is essential in supporting the National Military Strategy.

3. Source of Savings:

	$ in Millions
Inflation	5.19
Vendor Procurement	57.76
Manufacturing	44.72
Other	27.22
Total	134.89

4. Advantages of the MYP

This MYP strategy has been structured to achieve significant savings ($135M) over annualized procurements. The MYP strategy is also planned to allow a quantity range of missiles in each FY, allowing the Government the flexibility to meet emergent requirements for more missiles, potentially including that for foreign military sales customers, while maintaining the MYP and the savings already established in the baseline. This flexibility can also yield missile deletions without forgoing MYP benefits, but this may erode some of the savings due to a reduction in economies of scale and the amortization of non-recurring efforts, which will have already occurred.

5. Impact on Industrial Base:

Implementation of this MYP will also yield a favorable impact on the industrial base. The stability afforded by the use of a MYP will allow the prime contractor to enter into long term agreements with subcontractors and suppliers, at every tier, which will provide substantial cost avoidance. Such long term agreements incentivize both the prime and subcontractors to invest in process improvements such as those cited above, thereby yielding long term benefits in terms of product quality and cost. The stability of the prime multiyear contract will also foster improved competition at the subcontractor level, as the offer of a longer term business arrangement will encourage more aggressive pursuit of a contract award. The contractor and subcontractors will face reduced risk when implementing production process improvements, facility improvements, tooling design improvements, and fabrication process improvements. The ability for the Government and industry to enter into a long term agreement will allow industry the opportunity to place capital investments upfront, which reduces the overall cost and improves the quality of the Tactical Tomahawk missile.

6. Multiyear Procurement Summary: ($M)

	Annual Contracts	MYP Alternate
Quantity	1,784	1,784
Total Contract Price	$1,365	$1,230
Cancellation Ceiling (highest point)		
Funded		
Unfunded		$24
$ Cost Avoidance Over Annual		$135
% Cost Avoidance Over Annual		9.9%

Exhibit MYP-2, Total Program Funding Plan					Date						
					February 2003						
Appropriation/Budget Activity					P-1 Line Item Nomenclature						
Weapons Procurement Navy/BA-2 Other Missiles					TOMAHAWK (J2EL)(PEO(W))(BLI:210200)						
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Procurement Quantity				267	218	422	406	471			1784
Annual Procurement											
Gross Cost				274422	232202	390100	408944	463106			1768774
Less PY Adv Procurement				-	-	-	-	-			-
Net Procurement (=P-1)				274422	232202	390100	408944	463106			1768774
Plus CY Adv Procurement				-	-	-	-	-			-
Weapon System Cost				274422	232202	390100	408944	463106			1768774
Multiyear Procurement											
Gross Cost (P-1)				227588	199211	360771	390785	455523			1633878
Less PY Adv Procurement				-	-7185	-13909	-13382	-15524			-50000
Net Procurement (=P-1)				227588	192026	346862	377403	439999			1583878
Advance Procurement											
For FY 2004				-	-	-	-	-			
For FY 2005				7185	-	-	-	-			7185
For FY 2006				13909	-	-	-	-			13909
For FY 2007				13382	-	-	-	-			13382
For FY 2008				15524	-	-	-	-			15524
Total Adv Procurement				50000	-	-	-	-			50000
Weapon System Cost				277588	192026	346862	377403	439999			1633878
Multiyear Savings ($)				-3166	40176	43238	31541	23107			134896
Cancellation Ceiling - Funded											
Cancellation Ceiling - Unfunded				19843	24029	17760	12241				
OUTLAYS											
Annual				12332	180190	288951	337541	400386	352234	197140	1768774
Multiyear				12267	177368	260115	297178	366620	330364	189966	1633878
Savings				65	2822	28836	40363	33766	21870	7174	134896

Remarks

Exhibit MYP-3, Contract Funding Plan					Date **February 2003**						
Appropriation/Budget Activity Weapons Procurement Navy/BA-2 Other Missiles					P-1 Line Item Nomenclature TOMAHAWK (J2EL)(PEO(W))(BLI:210200)						
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Procurement Quantity				267	218	422	406	471			1784
Annual Procurement											
Gross Cost				223321	179487	318399	301547	342464			1365218
Less PY Adv Procurement				-	-	-	-	-			-
Net Procurement (=P-1)				223321	179487	318399	301547	342464			1365218
Plus CY Adv Procurement				-	-	-	-	-			-
Contract Price				223321	179487	318399	301547	342464			1365218
Multiyear Procurement											
Gross Cost (P-1)				176487	146496	289070	283388	334881			1230322
Less PY Adv Procurement				-	-7185	-13909	-13382	-15524			-50000
Net Procurement (=P-1)				176487	139311	275161	270006	319357			1180322
Advance Procurement											
For FY 2004				-	-	-	-	-			
For FY 2005				7185	-	-	-	-			7185
For FY 2006				13909	-	-	-	-			13909
For FY 2007				13382	-	-	-	-			13382
For FY 2008				15524	-	-	-	-			15524
Total Adv Procurement				50000	-	-	-	-			50000
Contract Price				226487	139311	275161	270006	319357			1230322
Multiyear Savings ($)				-3166	40176	43238	31541	23107			134896
Multiyear Savings (%)											9.9%
Cancellation Ceiling - Funded											
Cancellation Ceiling - Unfunded				19843	24029	17760	12241				
OUTLAYS											
Annual				1856	153389	244824	272591	313606	272624	106328	1365218
Multiyear				1792	150567	215988	232228	279840	250753	99154	1230322
Savings				64	2822	28836	40363	33766	21871	7174	134896

Remarks

Exhibit MYP-4, Present Value Analysis					Date **February 2003**						
Appropriation/Budget Activity Weapons Procurement Navy/BA-2 Other Missiles					P-1 Line Item Nomenclature TOMAHAWK (J2EL)(PEO(W))(BLI:210200)						
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Annual Proposal											
Then Year Cost				1,856.000	153,389.000	244,824.000	272,591.000	313,606.000	272,624.000	106,328.000	1,365,218.000
Constant Year Cost				1,856.000	152,902.000	241,547.000	263,687.000	298,671.000	256,015.000	99,234.000	1,313,912.000
Present Value				1,773.000	141,666.000	217,068.000	229,839.000	252,505.000	209,935.000	78,926.000	1,131,712.000
Multiyear Procurement											
Then Year Cost				1,792.000	150,567.000	215,988.000	232,228.000	279,840.000	250,753.000	99,154.000	1,230,322.000
Constant Year Cost				1,792.000	150,189.000	213,291.000	224,534.000	266,428.000	235,439.000	92,538.000	1,184,211.000
Present Value				1,711.000	139,152.000	191,675.000	195,712.000	225,246.000	193,062.000	73,601.000	1,020,159.000
Difference											
Then Year Cost				64.000	2,822.000	28,836.000	40,363.000	33,766.000	21,871.000	7,174.000	134,896.000
Constant Year Cost				64.000	2,713.000	28,256.000	39,153.000	32,243.000	20,576.000	6,696.000	129,701.000
Present Value				62.000	2,514.000	25,393.000	34,127.000	27,259.000	16,873.000	5,325.000	111,553.000

Remarks

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**							P-1 ITEM NOMENCLATURE **Tomahawk EOQ (MYP)**					
Program Element for Code B Items: **BA2/Other Missiles P.E. #0204229N**							Other Related Program Elements					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
COST (In Millions)		**B**			**$50.000**							**$50.000**

MISSION AND DESCRIPTION:

Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of the following variants: (1) RGM/UGM -109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser; (5) RGM/UGM-109E, Tactical Tomahawk. The Land Attack Surface Launch Nuclear and Anti-ship versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

BASIS FOR FY 2004 BUDGET REQUEST:

The FY2004 is the only year that includes advanced procurement funding for the Multi-Year Procurement (MYP) contract. The amount includes Economic Order Quantity (EOQ) requirements to support the MYP contract covering FY2004 through FY2008.

Exhibit P-10 Advance Procurement Requirements Analysis **(Page 1 - Funding)**							Date: **February 2003**						
Appropriation (Treas) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**							P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**						
Weapon System **Tomahawk**				First System (BY1) Award Date **June 2004**			Interval Between Systems **Avg 9 Missiles Per Week**						
($ in Millions)													
	PLT	When Rqd	Prior Years	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	To Complete	Total
Tactical Tomahawk Qty						267	218	422	406	471			1784
EOQ													
FOR FY2005						7.2							7.2
FOR FY2006						13.9							13.9
FOR FY2007						13.4							13.4
FOR FY2008						15.5							15.5
Total AP			0	0	0	50.0	0	0	0	0	0	0	50.0

Description:

This line item funds EOQ requirements for the FY2004 through FY2008 MYP Tomahawk program.

Exhibit P-10 Advance Procurement Requirements Analysis **(Page 2 - Budget Justification)**							Date: **February 2003**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**					Weapon System **Tomahawk**		P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**		
(TOA, $ in Millions)									
	CY PLT	QPA	Unit Cost	FY 2003 for FY 2004 Qty	FY 2003 Contract Forecast Date	FY 2003 Total Cost Request	FY 2004 for FY 2005 Qty	FY 2004 Contract Forecast Date	FY 2004 Total Cost Request
End Item									
Tactical Tomahawk EOQ							VAR	Jun-04	50.0
Total Advance Proc						0.0			50.0

Description:

P-1 Shopping List Item No. Exhibit P-10, Advance Procurement Funding

Exhibit P-10 Advance Procurement Requirements Analysis (Page 3 - Present Value Analysis)			Date: **February 2003**							
Appropriation (Treas) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**			Weapon System **Tomahawk**				P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**			
(TOA, $ in Millions)										
	Prior Years	CY FY 2002	BY1 FY 2003	BY2 FY 2004	BY2 + 1 FY 2005	BY2 + 2 FY 2006	BY2 + 3 FY 2007	BY2 + 4 FY 2008	**To Comp**	Total
Proposal w/o AP										
Then Year Cost				12.332	180.190	288.951	337.541	400.386	549.370	1768.770
Constant Year Cost				12.332	179.527	284.921	326.581	381.407	516.074	1700.842
Present Value				11.780	166.335	256.047	284.661	322.452	417.355	1458.630
AP Proposal										
Then Year Cost				12.267	177.368	260.115	297.178	366.620	520.326	1633.874
Constant Year Cost				12.267	176.814	256.665	287.428	349.163	488.804	1571.141
Present Value				11.718	163.822	230.654	250.533	295.193	395.157	1347.077
Difference										
Then Year Cost				0.064	2.822	28.836	40.363	33.765	29.045	134.895
Constant Year Cost				0.064	2.713	28.256	39.153	32.243	27.272	129.701
Present Value				0.061	2.514	25.393	34.127	27.259	22.198	111.552
Savings w/ AP (Then Year Cost)				0.064	2.822	28.836	40.363	33.765	29.045	134.895

Remarks :

Present value is calculated in accordance with DoD instruction 7041.3

Exhibit P-10 Advance Procurement Requirements Analysis (Page 4 - Execution)								Date: **February 2003**							
Appropriation (Treas) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**								Weapon System **Tomahawk**		P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**					
(TOA, $ in Millions)															
	PLT	PY QTY FY2002	PY Contract Forecast Date FY2002	PY Actual Contract Date FY2002	PY Total Cost Request FY2002	PY Actual Contract Cost FY2002	CY QTY FY2003	CY Contract Forecast Date FY2003	CY Actual Contract Date * FY2003	CY Total Cost Request FY2003	CY Actual Contract Cost * FY2003	BY QTY FY2004	BY Contract Forecast Date FY2004	BY2 QTY FY2005	BY2 Contract Forecast Date FY2005
TACTOM EOQ												VAR	Jun 04	VAR	Jun 04
Total AP															

Description:
This line item funds EOQ requirements for the FY2004 through FY2008 MYP Tomahawk program.

P-1 Shopping List Item No.

Exhibit P-10 Advance Procurement Requirements Analysis (Page 5 - Execution [Obligations/Expenditures])						Date: **February 2003**								
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**						Weapon System **Tomahawk**			P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**					
(TOA, $ in Millions)														
	Oct-01	**Nov-01**	**Dec-01**	**Jan-02**	**Feb-02**	**Mar-02**	**Apr-02**	**May-02**	**Jun-02**	**Jul-02**	**Aug-02**	**Sep-02**	**Later**	**TOTAL**
FY02 T. L. SCHED														
GFE OBLIG SCHED														
TOT OBLIGATIONS														
TOT EXPENDITURES														
	Oct-02	**Nov-02**	**Dec-02**	**Jan-03**	**Feb-03**	**Mar-03**	**Apr-03**	**May-03**	**Jun-03**	**Jul-03**	**Aug-03**	**Sep-03**	**Later**	**TOTAL**
FY 03 T. L. SCHED														
GFE OBLIG SCHED														
TOT OBLIGATIONS														
TOT EXPENDITURES														
	Oct-03	**Nov-03**	**Dec-03**	**Jan-04**	**Feb-04**	**Mar-04**	**Apr-04**	**May-04**	**Jun-04**	**Jul-04**	**Aug-04**	**Sep-04**	**Later**	**TOTAL**
FY 04 T. L. SCHED														
GFE OBLIG SCHED														
TOT OBLIGATIONS									50.0					50.0
TOT EXPENDITURES												0.3	49.7	50.0

Narrative:

BUDGET ITEM JUSTIFICATION SHEET **P-40**											**DATE:** **February 2003**	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**							P-1 ITEM NOMENCLATURE **Evolved SEASPARROW Missile (ESSM) (LI#230700)**					
Program Element for Code B Items: **0604755N, Proj. 20173**							Other Related Program Elements					
	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	32		13	23	105	111	153	195	186	206	1052	2076
COST ($M)	$76.3	B	$41.3	$42.7	$112.8	$102.6	$114.6	$142.3	$134.4	$148.4	$945.7	$1,861.1
Initial Spares ($M)	$0.0		$0.6	$1.9	$1.2	$1.5	$1.6	$1.1	$1.1	$0.9	Cont.	$9.9

PROGRAM OVERVIEW:

The Evolved SEASPARROW Missile (ESSM) Program is an international cooperative effort to design, develop, test, and produce a new and improved version of the NATO SEASPARROW missile (RIM-7P) with the kinematic performance to defeat current and projected threats that possess low altitude, high velocity and maneuver characteristics beyond the engagement capabilities of the RIM-7P. The ESSM will provide an evolved kinematically improved aft-end missile section for mating, as an all up round, with the modified RIM-7P forebody guidance and warhead section. The ESSM improvement will provide the capability to counter maneuvering anti-ship missiles, expand battle space, and increase system firepower. The ESSM is designed for "quad pack" use in the MK41 Vertical Launching System.

ESSM is a cooperative effort among ten NATO SEASPARROW nations (Australia, Canada, Denmark, Germany, Greece, Netherlands, Norway, Spain, Turkey, and the U.S.). An addendum to the NATO SEASPARROW Surface Missile System Memorandum of Understanding (MOU), covering the Engineering and Manufacturing Development (EMD) phase of the ESSM was signed in June 1995. The MOU for the cooperative production of ESSM was signed 27 December 1997. Authority to enter into Low Rate Initial Production (LRIP) was granted 07 March 2001.

The FY 04 request will support the first Full Rate Production contract award of 105 missiles plus U.S. share of support as defined in the MOU. The FY-05 request will support the procurement of 111 missiles plus associated production support (U.S. share) in accordance with the MOU. Additionally, the U.S. is required to pay its share of non-recurring investment for performance characterization studies.

ESSM RDT&E funding is included in program element 0604755N, Project 20173 and the program element 0604756N, Project 20173.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System **Evolved SEASPARROW Missile (ESSM)**											DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **12ES BLI 230700**										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 2001 and Prior	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
ES001	Missile Hardware														
	All Up Round		20,953	13	848	11,030	23	790	18,170	105	615	64,555	111	555	61,636
	AEGIS S-Band Uplink/Downlink		2,848	13	82	1,066	23	82	1,886	79	82	6,478	44	83	3,652
	Warhead Compatible Telemeter (WCT)		1,120	6	58	348	12	58	696	20	57	1,148	27	57	1,535
	Fuze ECP Backfit			36	143	5,150									
	Shipping Containers												5	20	100
	Radome Life of Type buy					832			2,947						
	HC-434 Propellant Binder (SEASPARROW)					600									
	Rocket motors (SEASPARROW)			93	15	1,400	140	15	2,100	400	15	6,000			
	MK 25 Quadpack Canisters		2,448	3	271	812	6	326	1,955	20	296	5,914	11	305	3,360
	Total Hardware		27,369			21,238			27,754			84,095			70,283
ES830	Procurement Support														
	Tooling and Test Equipment		17,486						1,088			3,560			
	Peformance Characterization Non-recurring					5,795						10,000			5,000
	MOU Average Unit Cost Adjustment														11,905
	Production Engineering		31,409			14,222			13,875			15,119			15,362
	Total Procurement Support		48,895			20,017			14,963			28,679			32,267
	Total Flyaway Cost		76,264			41,255			42,717			112,774			102,550
ES002	Fleet Support														
	Total Fleet Support														
	Weapon System Cost		76,264			41,255			42,717			112,774			102,550
			76,264			**41,255**			**42,717**			**112,774**			**102,550**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System: ESSM	A. DATE: February 2003
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy/BA-2 Other Missiles	C. P-1 ITEM NOMENCLATURE: 22ES BLI 230700	SUBHEAD: 22ES

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR - 2002										
All Up Round	13	848	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 04	Yes	Mar 00
AEGIS S-Band	13	82	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 04	Yes	Mar 00
WCT	6	58	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 04	Yes	Mar 00
Fuze Backfit	36	143	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 04	Yes	Mar 00
Rocket Motor (SEASPARROW)	93	15	NAVAIR		SS/Option	Alliant Techsystems , Rocket Center WV				
MK 25 Canister	3	271	NAVSEA		SS/Option	United Defense, Minneapolis, MN	Jul 02	Feb 04	Yes	
FISCAL YEAR - 2003										
All Up Round	23	790	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 05	Yes	Mar 00
AEGIS S-Band	23	82	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 05	Yes	Mar 00
WCT	12	58	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Dec 02	Apr 05	Yes	Mar 00
Rocket Motor (SEASPARROW)	140	15	NAVAIR			Alliant Techsystems , Rocket Center WV				
MK 25 Canister	6	326	NAVSEA		SS/Option	United Defense, Minneapolis, MN	Apr 03	Dec 04	Yes	
FISCAL YEAR - 2004										
All Up Round	105	615	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Apr 04	Apr 06	Yes	Mar 00
AEGIS S-Band	79	82	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Apr 04	Apr 06	Yes	Mar 00
WCT	20	57	NAVSEA	Oct 2001	SS/FFP	Raytheon Co., Tucson AZ	Apr 04	Apr 06	Yes	Mar 00
Rocket Motor (SEASPARROW)	400	15	NAVAIR			Alliant Techsystems , Rocket Center WV				
MK 25 Canister	20	296	NAVSEA		SS/Option	United Defense, Minneapolis, MN	Apr 04	Dec 05	Yes	
FISCAL YEAR - 2005										
All Up Round	111	555	NAVSEA	Oct 2004	SS/FFP	Raytheon Co., Tucson AZ	Apr 05	Apr 06	Yes	Mar 00
AEGIS S-Band	44	83	NAVSEA	Oct 2004	SS/FFP	Raytheon Co., Tucson AZ	Apr 05	Apr 06	Yes	Mar 00
WCT	27	57	NAVSEA	Oct 2004	SS/FFP	Raytheon Co., Tucson AZ	Apr 05	Apr 06	Yes	Mar 00
Shipping Container	5	20	NAVSEA	Oct 2004	SS/FFP	Raytheon Co., Tucson AZ	Apr 05	Apr 06	Yes	Mar 00
MK 25 Canister	11	305	NAVSEA		SS/Option	United Defense, Minneapolis, MN	Apr 05	Dec 06	Yes	

D. REMARKS

In FY-02, an ESSM Long Lead Material (LLM) contract for the was awarded in April 2002.

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**			Weapon System **ESSM**		P-1 ITEM NOMENCLATURE **22ES BLI 230700**	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
EVOLVED SEASPARROW MISSILE	Raytheon Co, Tucson AZ	120	300	576	6	6	24	24	36	E
MK 25 CANISTER	United Defense, Minneapolis	120	330	480	3	4	24	20	27	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2002	N	13	0	13							LLM								A										13
MK 25 Canister/United Defense	2002	N	3	0	3										A															3
ESSM/Raytheon	2003	N	23	0	23															A										23
MK 25 Canister/United Defense	2003	N	6	0	6																			A						6

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2002	N	13	0	13							13																		0
MK 25 Canister/United Defense	2002	N	3	0	3					3																				0
ESSM/Raytheon	2003	N	23	0	23																	12	11							0
MK 25 Canister/United Defense	2003	N	6	0	6															3	3									0
ESSM/Raytheon	2004	N	105	0	105							A																		105
MK 25 Canister/United Defense	2004	N	20	0	20							A																		20
ESSM/Raytheon	2005	N	111	0	111																			A						111
MK 25 Canister/United Defense	2005	N	11	0	11																			A						11

Remarks: In FY-02 a Long Lead Material (LLM) contract was awarded in April. The definitized contract award was in December 02. MK 25 Canister quantities shown for production rates reflect all canisters, not just those in the ESSM budget

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2003					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**				Weapon System **ESSM**		P-1 ITEM NOMENCLATURE **22ES BLI 230700**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total		Unit of Measure
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total		Unit of Measure
EVOLVED SEASPARROW MISSILE	Raytheon Co, Tucson AZ	120	300	576	6	6	24	24	36		E
MK 25 CANISTER	United Defense, Minneapolis	120	330	480	3	4	24	20	27		E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007												BAL
						2005			CALENDAR YEAR 2006										CALENDAR YEAR 2007												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2003	N	23	23	0																									0
MK 25 Canister/United Defense	2003	N	6	6	0																									0
ESSM/Raytheon	2004	N	105	0	105							8	8	8	8	12	8	8	12	8	8	9	8							0
MK 25 Canister/United Defense	2004	N	20	0	20			3	3	4	3	4	3																	0
ESSM/Raytheon	2005	N	111	0	111																			11	8	12	8	12	8	52
MK 25 Canister/United Defense	2005	N	11	0	11															2	2	2	2	3						0
ESSM/Raytheon	2006	N	153	0	153							A																		153
MK 25 Canister/United Defense	2006	N	22	0	22							A																		22
ESSM/Raytheon	2007	N	195	0	195																			A						195
MK 25 Canister/United Defense	2007	N	32	0	32																			A						32

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009												BAL
						2007			CALENDAR YEAR 2008										CALENDAR YEAR 2009												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2005	N	111	59	52	8	12	8	12	12																				0
MK 25 Canister/United Defense	2005	N	11	11	0																									0
ESSM/Raytheon	2006	N	153	0	153							12	12	12	12	12	12	12	12	12	13	16	16							0
MK 25 Canister/United Defense	2006	N	22	0	22			3	3	3	3	3	3	4																0
ESSM/Raytheon	2007	N	195	0	195																			16	16	16	16	16	16	99
MK 25 Canister/United Defense	2007	N	32	0	32															4	4	4	4	4	4	4	4			0
ESSM/Raytheon	2008	N	186	0	186							A																		186
MK 25 Canister/United Defense	2008	N	29	0	29							A																		29
ESSM/Raytheon	2009	N	206	0	206																			A						206
MK 25 Canister/United Defense	2009	N	34	0	34																			A						34

Remarks:

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21				DATE February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**		Weapon System **ESSM**		P-1 ITEM NOMENCLATURE **22ES BLI 230700**	
		Production Rate		Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
EVOLVED SEASPARROW MISSILE	Raytheon Co, Tucson AZ	120	300	576	6	6	24	24	36	E
MK 25 CANISTER	United Defense, Minneapolis	120	330	480	3	4	24	20	27	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2010												FISCAL YEAR 2011										BAL
						2009			CALENDAR YEAR 2010												CALENDAR YEAR 2011									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2007	N	195	96	99	16	16	16	16	16	19																		0
MK 25 Canister/United Defense	2007	N	32	32	0																								0
ESSM/Raytheon	2008	N	186	0	186							12	14	16	16	16	16	16	16	16	16	16	16						0
MK 25 Canister/United Defense	2008	N	29	0	29			3	3	3	3	3	3	3	4	4													0
ESSM/Raytheon	2009	N	206	0	206																			16	16	16	18	16	20	104
MK 25 Canister/United Defense	2009	N	34	0	34															3	3	3	4	3	4	3	4	3	4	0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	Fiscal Year 2012												FISCAL YEAR 2013										BAL
						2011			CALENDAR YEAR 2012												CALENDAR YEAR 2013									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ESSM/Raytheon	2009	N	206	102	104	16	16	20	16	16	20																		0
MK 25 Canister/United Defense	2009	N	34	34	0																								0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA 2 Other Missiles

P-1 ITEM NOMENCLATURE
AMRAAM

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	1,537		55	100	53	46	101	150	140	150	87	2,419
COST ($M)	$1,095.0		$36.5	$50.0	$37.6	$36.1	$82.9	$114.1	$87.4	$87.0	$88.3	$1,715.0
Initial Spares ($M)	$25.3		$0.1	$0.4	$0.4	$0.4	$0.9	$1.2	$0.9	$0.9	$0.6	$31.0
Total ($M)	$1,120.3		$36.7	$50.3	$38.0	$36.5	$83.8	$115.3	$88.3	$87.9	$88.9	$1,745.8
Unit Cost ($M)	$0.729		$0.668	$0.503	$0.718	$0.793	$0.830	$0.769	$0.631	$0.586	$1.022	$0.722

MISSION AND DESCRIPTION:

The Advanced Medium Range Air-to-Air Missile (AMRAAM) is the next generation all-weather, all-environment radar guided missile developed by the Air Force and Navy . AMRAAM is smaller, faster, lighter, and has improved capabilities against very low-altitude and high-altitude targets in an electronic countermeasure environment. AMRAAM incorporates an active radar in conjunction with an inertial reference unit and microcomputer system which makes the missile less dependent upon the aircraft fire control system. This advanced capability enables the pilot to aim and fire several missiles at multiple targets.

FY2004/2005 PROGRAM JUSTIFICATION:

53 missiles will be procured in FY 2004 and 46 missiles in FY 2005 along with non-recurring support costs such as; government field activity technical, test, and logistics support, procurement of test articles, test equipment to support the AIM-120C configuration, and procurement of peculiar support equipment.

WEAPONS PROCUREMENT, NAVY
FY 2004 PRESIDENT'S BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name: **AMRAAM** Date: **February 2003**

Cost Elements	Prior Years Total Cost	FY 2002 Quantity	Quantity Unit Cost	55 Total Cost	FY 2003 Quantity	Quantity Unit Cost	100 Total Cost	FY 2004 Quantity	Quantity Unit Cost	53 Total Cost	FY 2005 Quantity	Quantity Unit Cost	46 Total Cost
Missile Hardware													
Guidance & Control	**635.327**	**55**	**0.322**	**17.710**	**100**	**0.309**	**30.869**	**53**	**0.309**	**16.394**	**46**	**0.310**	**14.281**
Propulsion	**56.473**	**55**	**0.029**	**1.574**	**100**	**0.027**	**2.744**	**53**	**0.027**	**1.457**	**46**	**0.028**	**1.269**
Warhead	**14.118**	**55**	**0.007**	**0.394**	**100**	**0.007**	**0.686**	**53**	**0.007**	**0.364**	**46**	**0.007**	**0.317**
ECO	**20.887**			**0.693**			**0.616**			**0.328**			**0.508**
ST&TE	**40.120**			**4.994**			**1.549**			**3.845**			**3.754**
Production Tooling/Test Equip (Phase 3)				(4.100)			0.000			0.000			0.000
Production Tooling/Test Equip (Insensitive Munitions)				(0.300)			(0.549)			0.000			0.000
Production Tooling/Test Equip (Phase 4)				0.000			0.000			(3.100)			(1.000)
Production Tooling/Test Equip (Phase 4 AUR Test Eq)				0.000			0.000			0.000			0.000
Production Tooling/Test Equip (Phase 4 Reprog Eq)				0.000			0.000			0.000			0.000
Production Tooling/Test Equip (Phase 4 HIL Lab)				0.000			0.000			0.000			0.000
Production Tooling/Test Equip (Telemetry)				(0.594)			(1.000)			(0.745)			(2.754)
Production Tech Support	**160.507**			**4.435**			**4.635**			**4.783**			**5.077**
Production Tech Support				(4.233)			(4.488)			(4.594)			(4.854)
Insensitive Munitions Tech Support				(0.202)			(0.147)			(0.189)			(0.223)
Software Upgrade/OFP/SWUP				0.000			0.000			0.000			0.000
Containers/Ancilliary Eq	**2.230**			**0.000**			**0.000**			**3.000**			**3.000**
Hardware (Inventory-RCS)										(3.000)			(3.000)
Production Test	**57.006**			**3.453**			**5.708**			**4.556**			**4.254**
Total Flyaway Cost	**986.669**	**55**	**0.605**	**33.253**	**100**	**0.468**	**46.807**	**53**	**0.655**	**34.727**	**46**	**0.706**	**32.460**
Fleet Support													
Test Equipment	**57.725**			**0.471**			**0.450**			**0.293**			**0.308**
Handling Equipment	**0.795**			**0.000**			**0.000**			**0.000**			**0.000**
Training Equipment	**4.277**			**0.274**			**0.130**			**0.165**			**0.164**
ILS	**43.325**			**2.423**			**2.417**			**2.300**			**3.014**
Data & Pubs	**2.242**			**0.119**			**0.157**			**0.163**			**0.169**
Total Fleet Support	**108.364**			**3.287**			**3.154**			**2.921**			**3.655**
Weapon System Cost	**1,095.033**	**55**	**0.664**	**36.540**	**100**	**0.500**	**49.962**	**53**	**0.710**	**37.648**	**46**	**0.785**	**36.115**
Modifications													
Initial Spares	**25.251**			**0.122**			**0.383**			**0.391**			**0.373**
Total Program Cost	**1,120.284**	**55**	**0.667**	**36.662**	**100**	**0.503**	**50.345**	**53**	**0.718**	**38.039**	**46**	**0.793**	**36.488**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System: AMRAAM		A. DATE: February 2003		
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy / BA 2 Other Missiles					C. P-1 ITEM NOMENCLATURE: AMRAAM				SUBHEAD: Y2GB	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECHNICAL DATA PACKAGES AVAILABLE NOW	IF NO WHEN AVAILABLE
			36.6							
FY 2002	55	370	Eglin AFB, Fl	10-1-01	SS/FP	Lot XVI Raytheon Missile Systems, Tucson AZ	4/30/02	09/03	YES	
FY 2003	100	349	Eglin AFB, Fl	10-1-02	SS/FP	Lot XVII CONTRACTOR	3/31/03	09/04	YES	
FY 2004	53	350	Eglin AFB, Fl	10-1-03	SS/FP	Lot XVIII CONTRACTOR	3/31/04	09/05	YES	
FY 2005	46	356	Eglin AFB, Fl	10-1-04	SS/FP	Lot XIV CONTRACTOR	3/31/05	09/06	YES	

D. REMARKS

FY 2004/2005 BUDGET PRODUCTION SCHEDULE, P-21							DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA 2 Other Missiles**			Weapon System **AMRAAM**		P-1 ITEM NOMENCLATURE **AMRAAM**		
		Production Rate			Procurement Lead-times		
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AMRAAM	Raytheon	450	960	1200	0	6	21	18	24	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001										CALENDAR YEAR 2002										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2001 (Lot 15)			582	0	582																								
Raytheon Systems Co.	01	AF	170	0	170							A																16	16	138
Raytheon Systems Co.	01	N	63	0	63							A																8	55
Raytheon Systems Co.	01	FMS	349	0	349							A													2			28	21	298
AMRAAM FY 2002 (Lot 16)			916	0	916																								
Raytheon Systems Co.	02	AF	190	0	190																			A					190
Raytheon Systems Co.	02	N	55	0	55																			A					55
Raytheon Systems Co.	02	FMS	671	0	671																			A					671

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004										BAL
						2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2001 (Lot 15)			582	91	491																								
Raytheon Systems Co.	01	AF	170	32	138	16	16	12	12	16	16	16	20	14															0
Raytheon Systems Co.	01	N	63	8	55	4	8	4	8	4	4	4	8	11															0
Raytheon Systems Co.	01	FMS	349	51	298	26	22	20	24	24	24	24	18	20	48	48													0
AMRAAM FY 2002 (Lot 16)			916	0	916																								
Raytheon Systems Co.	02	AF	190	0	190													2	3	2	3	6	27	28	28	28	28	35		0
Raytheon Systems Co.	02	N	55	0	55															2	4	7	8	8	8	8	8	2		0
Raytheon Systems Co.	02	FMS	671	0	671												77	75	72	50	70	64	44	44	44	44	44	43		0

Remarks:

FY 2004/2005 BUDGET PRODUCTION SCHEDULE, P-21								DATE February 2003			
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA 2 Other Missiles**				Weapon System **AMRAAM**		P-1 ITEM NOMENCLATURE **AMRAAM**					
		Production Rate			Procurement Lead-times						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
AMRAAM	Raytheon	450	960	1200	0	6	21	18	24	E	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004												BAL
						2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2003 (Lot 17)			858	0	858																								
Raytheon Systems Co.	03	AF	158	0	158						A																	13	145
Raytheon Systems Co.	03	N	100	0	100						A																	8	92
Raytheon Systems Co.	03	FMS	600	0	600						A																	50	550
AMRAAM FY 2004 (Lot 18)			854	0	854																								
Raytheon Systems Co.	04	AF	201	0	201																	A							201
Raytheon Systems Co.	04	N	53	0	53																	A							53
Raytheon Systems Co.	04	FMS	600	0	600																	A							600

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2005												FISCAL YEAR 2006												BAL
						2004			CALENDAR YEAR 2005										CALENDAR YEAR 2006												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2003 (Lot 17)			858	71	858																								
Raytheon Systems Co.	03	AF	158	13	158	13	13	13	13	13	13	13	13	13	14	14														0
Raytheon Systems Co.	03	N	100	8	92	8	8	8	8	8	8	8	9	9	9	9														0
Raytheon Systems Co.	03	FMS	600	50	550	50	50	50	50	50	50	50	50	50	50	50														0
AMRAAM FY 2004 (Lot 18)			854	0	854																								
Raytheon Systems Co.	04	AF	201	0	201												16	16	16	17	17	17	17	17	17	17	17			0
Raytheon Systems Co.	04	N	53	0	53												4	4	4	4	4	4	4	5	5	5	5			0
Raytheon Systems Co.	04	FMS	600	0	600												50	50	50	50	50	50	50	50	50	50	50			0

FY 2004/2005 BUDGET PRODUCTION SCHEDULE, P-21								DATE February 2003			
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA 2 Other Missiles**				Weapon System **AMRAAM**		P-1 ITEM NOMENCLATURE **AMRAAM**					
		Production Rate			Procurement Lead-times						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
AMRAAM	Raytheon	450	960	1200	0	6	21	18	24	E	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2005												FISCAL YEAR 2006										BAL
						2004	CALENDAR YEAR 2005												CALENDAR YEAR 2006										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2005 (Lot 19)			848	0	69																							
Raytheon Systems Co.	05	AF	202	0	16						A																	16	186
Raytheon Systems Co.	05	N	46	0	3						A																	3	43
Raytheon Systems Co.	05	FMS	600	0	50						A																	50	550

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2007												FISCAL YEAR 2008										BAL
						2006	CALENDAR YEAR 2007												CALENDAR YEAR 2008										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2005 (Lot 19)			848	69	779																							
Raytheon Systems Co.	05	AF	202	16	186	16	17	17	17	17	17	17	17	17	17	17													0
Raytheon Systems Co.	05	N	46	3	43	3	4	4	4	4	4	4	4	4	4	4													0
Raytheon Systems Co.	05	FMS	600	50	550	50	50	50	50	50	50	50	50	50	50	50													0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: February 2003

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
Weapons Procurement, Navy/BA-2 Other Missiles	AIM-9X Sidewinder
Program Element for Code B Items:	Other Related Program Elements 0207161N

	Prior Years	ID Code	FY 2002*	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY		B	105	284	167	162	173	229	213	183	3421	4937.000
COST ($M)			$25.779	$52.230	$35.818	$35.582	$38.716	$49.586	$50.305	$46.059	$849.095	1181.470
Initial Spares ($M)			$0.945	$0.901	$1.413	$1.916	$2.264	$2.460	$3.273	$3.456	$0.000	16.628
Total ($M)*			$25.024	$53.131	$37.231	$37.498	$40.980	$52.046	$53.578	$49.515	$849.095	1198.098
Unit Cost ($M)			$0.238	$0.187	$0.223	$0.231	$0.237	$0.227	$0.252	$0.271		1.866

The AIM-9X (Sidewinder) short range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M (fuse, rocket motor and warhead). Anti-Tamper features are being incorporated to protect improvements inherent in this design.

FY 2002 Program Justification: Lot 2 LRIP option was executed in Nov 2001.
FY 2003 Program Justification: Lot 3 LRIP option was executed in Nov 2002.
FY 2004 Program Justification: Lot 4 Full Rate Production to be executed in FY04.
FY 2005 Program Justification: Lot 5 Contract Option for continued option to be executed in FY05.

The total quantity of missiles produced will be a combination of All up Rounds (AURs) and Captive Air Training Missiles (CATMs).

* FY 2002 funding includes a $1.7M Congressional add for the AIM-7 Sparrow DSM-156 Missiles Test Set Upgrade (added in the Operation and Maintenance, Navy appropriation and reclassified to the Weapons Procurement, Navy appropriation for execution purposes). DSM 156 is not a requirement of the AIM-9X Sidewinder program and has been excluded from the Total Program amounts.

Cost Elements	Prior Years Total Cost	FY 2002 Quantity	Quantity Unit Cost	105 Total Cost	FY 2003 Quantity	Quantity Unit Cost	284 Total Cost	FY 2004 Quantity	Quantity Unit Cost	167 Total Cost	FY 2005 Quantity	Quantity Unit Cost	162 Total Cost
Missile Hardware													
All Up Round		60	0.195	11.727	228	0.172	39.290	104	0.172	17.914	119	0.177	21.016
Captive Air Training Missile		45	0.111	4.976	56	0.122	6.809	63	0.152	9.591	43	0.156	6.708
Missile containers				0.382			0.682			0.470			0.446
Engineering Change Orders (ECO)				0.666			0.782			0.559			1.408
Special Test/Special Tooling Equipment				0.102			0.104			0.106			0.108
Non-Recurring													
Government SE/PM				2.190			2.277			2.851			2.653
Total Flyaway Cost		105	0.191	20.043	284	0.176	49.944	167	0.189	31.491	162	0.200	32.339
Fleet Support Cost													
Support Equipment (Peculiar Support/Bit Reprogram)				0.475			0.676			0.991			
Training													
Training Support				0.326			0.075			0.030			
Training Equipment													
DATM				0.427			0.213			0.000			
PEST													
CEST													
Airborne Test Equipment (ATE)				1.263			0.000			0.893			0.788
Data				0.045			0.072			0.079			0.063
Production Tech Support				1.500			1.250			2.334			2.392
Total Fleet Support				4.036			2.286			4.327			3.243
Weapons System Cost		105	0.229	24.079	284	0.184	52.230	167	0.214	35.818	162	0.220	35.582
Other Procurement Costs: Initial Spares				0.945			0.901			1.413			1.916
Total Program Cost				25.024			53.131			37.231			37.498
AIM-7 DSM-156 Test Set Upgrade (Cong Add)*				1.700	*								
Net P-1 Cost (Wpn Syst Cost+Cong Add-FY02 only)*				25.779									

* $1.7M Congressional add for the AIM-7 Sparrow DSM-156 Missiles Test Set Upgrade (added in the Operation&Maintenance, Navy appropriation and reclassified to the Weapons Procurement, Navy appropriation.

Remarks: FY 2003 unit cost includes cost of Seekers for 127 Navy and 128 AF weapons (Seeker costs previously budgeted beginning in FY 2004), and costs associated with "design to cost" contract profit clauses; FY 2004 unit cost includes cost of Seekers, Anti-tamper System, and incorporation of Control Actuation System design changes resulting from testing.

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 2003		
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 Other Missiles**					C. P-1 ITEM NOMENCLATURE **AIM-9X Sidewinder**				SUBHEAD Y2ER	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY02 AIM-9X LRIP 2 See Note 1	105	0.163	NAVAIR	May-96	Competitive-FPI	Raytheon System Co. Tucson, AZ	Nov 01	May 03	Yes	
FY03 AIM-9X LRIP 3 See Note 1	284	0.165	NAVAIR	May-96	Comp/FPI-Option	Raytheon System Co. Tucson, AZ	Nov 02	May 04	Yes	
FY04 AIM-9X LOT 4 See Note 1	167	0.168	NAVAIR	May-96	Comp/FPI-Option	Raytheon System Co. Tucson, AZ	Nov 03	May 05	Yes	
FY05 AIM-9X LOT 5 See Note 1	162	0.174	NAVAIR	May-96	Comp/FPI-Option	Raytheon System Co. Tucson, AZ	Nov 04	May 06	Yes	

D. REMARKS

1. Unit cost calculation assumes quantities remain constant. US Air Force procurement of 138 missiles (102 AUR, 36 CATM) in FY 02; 286 (204 AUR, 82 CATM) in FY03, and 364 missiles (243 AUR, 121 CATM) in FY04. Unit Cost consists of AUR, CATM and container.

FY 2004 President's BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2003					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 Other Missiles**			Weapon System			P-1 ITEM NOMENCLATURE **AIM-9X Sidewinder**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
AIM-9X (Sidewinder) Lot 2 *	Raytheon Systems Co.	100	332	800		1		18	19	Months	
	Tucson, AZ										
AIM-9X (Sidewinder) Lot 3 *	Raytheon Systems Co.	300	800	2400		1		18	19	Months	
	Tucson, AZ										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAI
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIM-9X Sidewinder (Lot 2)																													
Raytheon Systems Co.	02	N	105	0	105		A																	8			8	8	81
Raytheon Systems Co.	02	AF	138	0	138		A																				4	8	126
AIM-9X Sidewinder (Lot 3)																													
Raytheon Systems Co.	03	N	284	0	284														A										284
Raytheon Systems Co.	03	AF	286	0	286														A										286

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAI
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIM-9X Sidewinder (Lot 2)																													
Raytheon Systems Co.	02	N	105	24	81	8	8	7	8	16	17	17																	
Raytheon Systems Co.	02	AF	138	12	126	16	16	16	12	18	24	24																	
AIM-9X Sidewinder (Lot 3)																													
Raytheon Systems Co.	03	N	284	0	284								20	20	20	20	20	20	24	24	24	24	32	36					
Raytheon Systems Co.	03	AF	286	0	286								12	12	16	22	24	24	24	24	32	32	32	32					
AIM-9X Sidewinder (Lot 4)																													
Raytheon Systems Co.	04	N	167	0	167		A																		11	12	12	12	12	108
Raytheon Systems Co.	04	AF	364	0	364		A																		26	26	26	26	28	232
AIM-9X Sidewinder (Lot 5)																													
Raytheon Systems Co.	05	N	162	0	162														A										162
Raytheon Systems Co.	05	AF	256	0	256														A										256

Remarks: *Assumes joint Navy/Air Force production rates.

FY 2004 President's BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**			Weapon System		P-1 ITEM NOMENCLATURE **AIM-9X Sidewinder**
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AIM-9X (Sidewinder) Lot 4 *	Raytheon Systems Co.	300	800	2400		1		18	19	Months
	Tucson, AZ									
AIM-9X (Sidewinder) Lot 5 *	Raytheon Systems Co.	300	800	2400		1		18	19	Months
	Tucson, AZ									
AIM-9X (Sidewinder) Lot 6 *	Raytheon Systems Co.	300	800	2400		1		18	19	Months
	Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005	CALENDAR YEAR 2006												CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIM-9X Sidewinder (Lot 4)																													
Raytheon Systems Co.	04	N	167	59	108	12	12	12	16	16	20	20																	
Raytheon Systems Co.	04	AF	364	132	232	32	32	32	32	32	36	36																	
AIM-9X Sidewinder (Lot 5)																													
Raytheon Systems Co.	05	N	162	0	162								12	16	12	16	12	16	12	12	12	14	16						
Raytheon Systems Co.	05	AF	256	0	256								20	20	20	20	20	20	20	20	24	24	24	24					

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005	CALENDAR YEAR 2006												CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:
*Assumes joint Navy/Air Force production rates.

TY$

CLASSIFICATION: **UNCLASSIFIED**

Date: February 2003

BUDGET ITEM JUSTIFICATION SfEET
P-40

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
Weapons Procurement, Navy/BA-2 Otfer Missiles	**Joint Standoff Weapon (JSOW) (J2JS)**
Program Element for Code B Items:	Other Related Program Elements
Code B - P.E. 0604727N	**0604727F, 27324F**

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	1,046	B	0	165	429	463	490	404	387	405	8,011	11,800
COST ($M)	$545.06		$0.00	$101.26	$138.45	$137.15	$144.02	$126.23	$128.22	$130.17	$1,792.20	$3,242.75
Initial Spares ($M)	$0.73		$0.03	$0.00	$0.05	$0.05	$0.02	$0.01	$0.01	$0.00	$3.93	$4.84
Total ($M)	$545.79		$0.00	$101.26	$138.50	$137.20	$144.04	$126.24	$128.23	$130.17	$1,796.13	$3,247.59
Unit Cost ($M)	0.522		0.000	0.614	0.323	0.296	0.294	0.313	0.331	0.321	0.224	0.275

Joint Standoff Weapons (JSOW) is a joint USN/USAF program with the USN as the lead service. The JSOW program provides an air-to-ground glide weapon (AGM-154) capable of attacking a variety of targets during day, night, and adverse weather conditions for use against fixed area targets. The JSOW will enhance aircraft survivability as compared to current interdiction weapon systems by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW Global Positioning System (GPS)/Inertial Navigation System (INS) capability will allow several target kills per aircraft sortie. The Joint Mission Planning System (JMPS), funded in FY 00 - FY 03, provides a common Air Force and Navy mission planning system. This system replaces the existing Navy Tactical Aircraft Mission Planning System, TAMPS.

The JSOW Baseline variant (AGM-154A) will be integrated on USN and USAF aircraft, with a Joint (A/F, USN) planned inventory of 11,800 units. USN will procure an inventory of 8,800 All-Up-Rounds (AURs) for integration on F/A-18 aircraft, and the USAF will procure an inventory of 3,000 AURs for integration on F-16C/D, F-15E, B-1B, B-52, and B-2 aircraft. JSOW Baseline completed EMD testing, including initial Operational Test, with an exceptional test success rate of 91.3% (52 of 57) in July 1997. The JSOW Baseline (154A) commenced Full Rate Production (FRP) in FY 99. No FY 01 production contract for AGM-154As was awarded due to the need to complete an Engineering Change Proposal (ECP) to the control section. A production contract for JSOW-As was awarded in FY 02 (using FY 01 funds) based on a successful control section ECP Critical Design Review (CDR). The ECP effort was completed in Dec 02 and verified through successful weapon launches from F-16 and F-18 aircraft.

The JSOW Unitary variant (AGM-154C) utilizes the common airframe of the AGM-154A and B variants and incorporates an infrared uncooled seeker with Autonomous Targeting acquisition. The payload of choice is the 500 pound class BROACH multi-stage warhead. AGM-154C begins Low Rate Initial Production in FY 2003. Full Rate Production of the AGM-154C begins in FY 2004. The Navy's planned inventory is 3000 JSOW AGM-154C AURs.

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) AGM-154

Date: February 2003

Cost Elements	Prior Years Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost	**FY 2003** Quantity	Quantity Unit Cost	Total Cost	**FY 2004** Quantity	Quantity Unit Cost	Total Cost	**FY 2005** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware													
All Up Round (AUR)	275.432			0.000		0.415	68.546		0.252	108.233		0.238	110.021
Contractor (Warranty/ECO/Data)	84.564			0.000			4.970			8.858			7.454
Total Hardware	359.996	0	-	0.000	165	0.446	73.516	429	0.273	117.091	463	0.254	117.476
Procurement Support													
LC GEU/Control	11.056			0.000			0.000			0.000			0.000
JMPS INTEGRATION	1.478			0.000			1.313			0.000			0.000
Gov't In-house/Prod Supt	48.232			0.000			8.407			7.338			6.925
Special Tools and Test Equip	59.887			0.000			7.875			4.744			3.935
Containers	13.405			0.000			1.515			3.548			3.602
Telemetry	17.347			0.000			2.624			2.172			2.157
Command & Launch/ST&E/Mssion/SW	20.899			0.000			5.177			2.820			2.211
Total Procurement Support	172.304			0.000			26.910			20.622			18.830
Total Flyaway Cost	532.300	0	-	0.000	165	0.609	100.426	429	0.321	137.713	463	0.294	136.305
Fleet Support													
ILS/Support	10.523			0.000			0.835			0.738			0.842
Total Fleet Support	10.523			0.000			0.835			0.738			0.842
Weapons System Cost	542.823	0	-	0.000	165	0.614	101.262	429	0.323	138.451	463	0.296	137.147
LRIP-2 Acceleration	2.236												
Net P-1 Cost	545.060			0.000			101.262			138.451			137.147
Modifications													
Initial Spares	0.726			0.026			0.000			0.049			0.050
Total Program Cost	545.786	0	-	0.054	165	0.614	101.262	429	0.323	138.500	463	0.296	137.197

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) AGM-154A

Date: February 2003

Cost Elements	Prior Years Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost	**FY 2003** Quantity	Quantity Unit Cost	Total Cost	**FY 2004** Quantity	Quantity Unit Cost	Total Cost	**FY 2005** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware													
All Up Round (AUR)	260.936			0.000		0.289	23.128		0.191	48.634		0.182	43.386
Contractor (Warranty/ECO/Data)	84.564			0.000			4.231			7.644			6.290
Total Hardware	345.500	0	-	0.000	80	0.342	27.359	254	0.222	56.278	238	0.209	49.677
Procurement Support													
LC GEU/Control	11.056			0.000			0.000			0.000			0.000
JMPS INTEGRATION	1.478			0.000			1.313			0.000			0.000
Gov't In-house/Prod Supt	48.081			0.000			8.157			7.088			6.681
Special Tools and Test Equip	51.025			0.000			4.254			2.504			2.007
Containers	13.288			0.000			0.734			2.096			1.848
Telemetry	17.347			0.000			2.624			2.172			2.157
Command & Launch/ST&E/Mssion/SW	20.255			0.000			5.141			1.906			1.342
Total Procurement Support	162.531			0.000			22.222			15.766			14.035
Total Flyaway Cost	508.031	0	-	0.000	80	0.620	49.581	254	0.284	72.044	238	0.268	63.712
Fleet Support													
ILS/Support	10.523			0.000			0.588			0.520			0.592
Total Fleet Support	10.523			0.000			0.588			0.520			0.592
Weapons System Cost	518.554	0	-	0.000	80	0.627	50.170	254	0.286	72.564	238	0.270	64.304
LRIP-2 Acceleration	2.236			0.000			0.000			0.000			0.000
Net P-1 Cost	520.790			0.000			50.170			72.564			64.304
Modifications	0.000			0.000			0.000			0.000			0.000
Initial Spares	0.726			0.026			0.000			0.049			0.050
Total Program Cost	521.516	0	-	0.026	80	0.627	50.170	254	0.286	72.613	238	0.270	64.354

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)
AGM-154B

Date: February 2003

Cost Elements	Prior Years Total Cost	**FY 2002** Quantity	Unit Cost	Total Cost	**FY 2003** Quantity	Unit Cost	Total Cost	**FY 2004** Quantity	Unit Cost	Total Cost	**FY 2005** Quantity	Unit Cost	Total Cost
Missile Hardware													
All Up Round (AUR)	14.496			0.000			0.000			0.000			0.000
Contractor (Warranty/ECO/Data)	0.000			0.000			0.000			0.000			0.000
Total Hardware	14.496	0	-	0.000	0	-	0.000	0	-	0.000	0	-	0.000
Procurement Support													
LC GEU/Control													
JMPS INTEGRATION													
Gov't In-house/Prod Supt	0.151			0.000			0.000			0.000			0.000
Special Tools and Test Equip	3.900			0.000			0.000			0.000			0.000
Containers	0.117			0.000			0.000			0.000			0.000
Telemetry	0.000			0.000			0.000			0.000			0.000
Command & Launch/ST&E/Mssion/SW	0.644			0.000			0.000			0.000			0.000
Total Procurement Support	4.812			0.000			0.000			0.000			0.000
Total Flyaway Cost	19.308	0	-	0.000	0	-	0.000	0	-	0.000	0	-	0.000
Fleet Support													
ILS/Support	0.000			0.000			0.000			0.000			0.000
Total Fleet Support	0.000			0.000			0.000			0.000			0.000
Weapons System Cost	19.308	0	-	0.000	0	-	0.000	0	-	0.000	0	-	0.000
LRIP-2 Acceleration													
Net P-1 Cost	19.308			0.000			0.000			0.000			0.000
Modifications													
Initial Spares	0.000			0.000			0.000			0.000			0.000
Total Program Cost	19.308	0	-	0.000	0	-	0.000	0	-	0.000	0	-	0.000

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) AGM-154C

Date: February 2003

Cost Elements	Prior Years Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost	**FY 2003** Quantity	Quantity Unit Cost	Total Cost	**FY 2004** Quantity	Quantity Unit Cost	Total Cost	**FY 2005** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware													
All Up Round (AUR)	0.000		-	0.000		0.534	45.418		0.341	59.599		0.296	66.635
Contractor (Warranty/ECO/Data)	0.000			0.000			0.739			1.214			1.164
Total Hardware	0.000	0	-	0.000	85	0.543	46.157	175	0.348	60.813	225	0.301	67.799
Procurement Support													
LC GEU/Control													
JMPS INTEGRATION													
Gov't In-house/Prod Supt	0.000			0.000			0.250			0.250			0.244
Special Tools and Test Equip	4.962			0.000			3.621			2.239			1.928
Containers	0.000			0.000			0.780			1.452			1.754
Telemetry	0.000			0.000			0.000			0.000			0.000
Command & Launch/ST&E/Mssion/SW	0.000			0.000			0.036			0.914			0.868
Total Procurement Support	4.962			0.000			4.688			4.856			4.795
Total Flyaway Cost	4.962	0	-	0.000	85	0.598	50.845	175	0.375	65.669	225	0.323	72.594
Fleet Support													
ILS/Support	0.000			0.000			0.247			0.218			0.249
Total Fleet Support	0.000			0.000			0.247			0.218			0.249
Weapons System Cost	4.962	0	-	0.000	85	0.601	51.092	175	0.376	65.887	225	0.324	72.843
LRIP-2 Acceleration													
Net P-1 Cost	4.962			0.000			51.092			65.887			72.843
Modifications													
Initial Spares	0.000			0.000			0.000			0.000			0.000
Total Program Cost	4.962	0	-	0.000	85	0.601	51.092	175	0.376	65.887	225	0.324	72.843

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System JSOW	DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy B.A. 2-Other Missiles	Joint Standoff Weapon Systems	J2JS

Cost Element/ FISCAL YEAR	QUANTITY	UNIT* COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Missile H/W										
FY-03 AGM-154A	80	289	NAVAIR	Oct 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Mar 03	Mar 04	YES	N/A
FY-04 AGM-154A	254	191	NAVAIR	Oct 03	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 03	Mar 05	YES	N/A
FY-05 AGM-154A	238	182	NAVAIR	Oct 04	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 04	Mar 06	YES	N/A
FY-03 AGM-154C	85	534	NAVAIR	Oct 02	SS/FP Type	RAYTHEON SYSTEMS (Tucson, AZ)	Mar 03	Jun 04	YES	N/A
FY-04 AGM-154C	175	341	NAVAIR	Oct 03	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 03	Mar 05	YES	N/A
FY-05 AGM-154C	225	296	NAVAIR	Oct 04	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 04	Mar 06	YES	N/A

D. REMARKS: Reflects All-up-Round Hardware Unit Price

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FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21			DATE	February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER Missiles**		Weapon System **JSOW**	P-1 ITEM NOMENCLATURE JOINT STANDOFF WEAPONS (JSOW)	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	All variants 2-8-5*	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Joint Standoff Weapons (JSOW)`	Raytheon Company	1130	1680	1930		3	15	15	18	E
	Tucson, AZ									
AGM-154A, AGM-154C										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002										CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW Baseline/Raytheon Systems	2000	USN	454	112	342						16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	34
JSOW Baseline/Raytheon Systems	2000	AF	74	20	54						3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		0
JSOW Baseline/Raytheon Systems	2001	USN	29	0	29									A															29
JSOW Baseline/Raytheon Systems	2003	USN	80	0	80																		A						80
JSOW Baseline/Raytheon Systems	2003	AF	18	0	18																		A						18
JSOW-C/Raytheon Systems	2003	USN	85	0	85																		A						85

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004										CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW Baseline/Raytheon Systems	2000	USN	454	420	34	17	17																						0
JSOW Baseline/Raytheon Systems	2000	AF	74	74	0																								0
JSOW Baseline/Raytheon Systems	2001	USN	29	0	29			9	10	10																			0
JSOW Baseline/Raytheon Systems	2003	USN	80	0	80						6	6	6	6	7	7	7	7	7	7	7	7							0
JSOW Baseline/Raytheon Systems	2003	AF	18	0	18						1	1	1	1	1	1	2	2	2	2	2	2							0
JSOW-C/Raytheon Systems	2003	USN	85	0	85									4	6	8	8	10	11	12	13	13							0
JSOW Baseline/Raytheon Systems	2004	USN	254	0	254			A															21	21	21	21	21	21	107
JSOW Baseline/Raytheon Systems	2004	AF	335	0	335			A															27	27	28	28	28	28	141
JSOW-C/Raytheon Systems	2004	USN	175	0	175			A															14	14	14	14	14	15	75

Remarks: All variants, A, B, and C, have a common truck

* Assumes a 2-8-5 shift and contractor has achieved a stable running rate

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21

DATE February 2003

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2 OTHER Missiles

Weapon System
JSOW

P-1 ITEM NOMENCLATURE
JOINT STANDOFF WEAPONS (JSOW)

Item	Manufacturer's Name and Location	Production Rate MSR	All variants 2-8-5*	MAX	Procurement Leadtimes: ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Joint Standoff Weapons (JSOW)`	Raytheon Company	1130	1680	1930		3	15	15	18	E
	Tucson, AZ									
AGM-154A, AGM-154C										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004 / 2003 OCT	NOV	DEC	CALENDAR YEAR 2004 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2005 / CALENDAR YEAR 2005 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
JSOW Baseline/Raytheon Systems	2005	USN	238	0	238															A										238
JSOW Baseline/Raytheon Systems	2005	AF	363	0	363															A										363
JSOW-C/Raytheon Systems	2005	USN	225	0	225															A										225

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006 / 2005 OCT	NOV	DEC	CALENDAR YEAR 2006 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2007 / CALENDAR YEAR 2007 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
JSOW Baseline/Raytheon Systems	2004	USN	254	147	107	21	21	21	22	22																				0
JSOW Baseline/Raytheon Systems	2004	AF	335	194	141	28	28	28	28	29																				0
JSOW-C/Raytheon Systems	2004	USN	175	100	75	15	15	15	15	15																				0
JSOW Baseline/Raytheon Systems	2005	USN	238	0	238						19	19	20	20	20	20	20	20	20	20	20									0
JSOW Baseline/Raytheon Systems	2005	AF	363	0	363						30	30	30	30	30	30	30	30	30	31	31									0
JSOW-C/Raytheon Systems	2005	USN	225	0	225						18	18	18	19	19	19	19	19	19	19	19									0

Remarks: All variants, A, B, and C, have a common truck
* Assumes a 2-8-5 shift and contractor has achieved a stable running rate

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA2-Other Missiles**					P-1 ITEM NOMENCLATURE **SLAM-ER (J2SL) (PEO-W) (BLI: 223100)**							
Program Element for Code B Items: **N/A**					Other Related Program Elements **0604603N**							
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	271		30	120	84	90					0	595
COST ($M)	$194.9		$25.7	$82.2	$54.1	$61.6					$0.0	$418.5

MISSION AND DESCRIPTION: The SLAM-Expanded Response (SLAM-ER) missile modification program provides funds for Engineering Change Proposals (ECPs) and other improvements to the SLAM weapons components which are already in the inventory and require retrofit activity to produce the SLAM-ER missile. Additionally, exercise sections are procured to meet fleet training requirements. The SLAM-ER missile with the addition of Automatic Target Acquisition (ATA), Tactical Automated Mission Planning (TAMPS), Real Time Target Capability, Increased Range and Flight Envelope and Increased Warhead Penetration and Video Imagery Datalink obsolescence update has matured into a permanent Standoff Outside Area Defense (SOAD) weapon.

-

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

February 2003

MODELS OF SYSTEM AFFECTED: AGM-84E TYPE MODIFICATION: MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

DESCRIPTION/JUSTIFICATION:

Converts SLAM to SLAM ER configuration, increasing range, accuracy, lethality, and enhances inter-service compatibility.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		9.1		16.8		10.8		9.7														
INSTALLATION KITS (1)(2)(3)	271	143.7	30	18.5	120	57.4	84	44.4	90	51.8											421.0	219.6
				0.617		0.478		0.529		0.576												
INSTALLATION KITS NONRECURRING						11.1		0.5														11.1
EQUIPMENT		6.0		0.0		0.0																6.0
SOFTWARE MAINTENANCE																						
ENGINEERING CHANGE ORDERS		10.8		0.5		0.2		0.2		0.2												11.5
DATA		2.4		0.0		0.0																2.4
TRAINING EQUIPMENT (Exercise Sections)	28	3.1	6	0.9	25	3.3	9	1.3														7.3
SUPPORT EQUIPMENT (Containers)	335	2.9	30	0.4	120	1.5	84	1.1	90	1.2												4.8
PCM TRAYS		0.4		0.2		0.8		0.3														1.4
OTHER (Field Activity Support) (4)		20.9		5.2		8.0		6.3		8.4												34.1
INTERIM CONTRACTOR SUPPORT		0.4		0.0		0.0																0.4
INSTALL COST																						
SAASM INTEGRATION/INSTALL		0.0		0.0		0.0																
ATA RETROFIT	125	4.3	0	0.0	0	0.0																4.3
TOTAL PROCUREMENT	271	194.9	30	25.7	120	82.2	84	54.1	90	61.6	0	0.0	0	0.0	0	0.0	0	0.0				302.8

Note(s):

(1) Kit consists of GFE SLAM AUR, and GFE components.

(2) Installations cost are included in the installation kits line since kit cost and installation are non-severable

(3) Estimates cost for installation kits/installation of hardware is effected by concurrent FMS production (HARPOON). FMS assumptions include 100 units.

(4) Warhead cost included OTHER (Field Activity Support)

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **AGM-84E** MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES:	FY 2002:	Feb-02	FY 2003:	**Dec-02**	FY 2004:	**Dec-03**	FY 2005:	**Dec-04**
DELIVERY DATE:	FY 2002:	Jan-03	FY 2003:	**Oct-03**	FY 2004:	**Dec-04**	FY 2005:	**Dec-05**

($ in Millions)

Cost:	Prior Years		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																				
FY 2001 EQUIPMENT																				
FY 2002 EQUIPMENT																				
FY 2003 EQUIPMENT																				
FY 2004 EQUIPMENT																				
FY 2005 EQUIPMENT																				
FY 2006 EQUIPMENT																				
FY 2007 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE:

	FY 2000	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	200	71	0	0	0	30	0	0	0	120	0	0	0	84	-	-	-	90	-	-	-		-	-	-		-	-	-	0	595
Out	164	18	18	21	21	15	15	15	14	18	7	8	8	7	30	30	12	21	21	21	21	23	23	22	22	-	-	-	-	174	595

Input schedule reflects delivery of fleet baseline SLAM missiles to the contractor's site for modification.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/ BA-2

P-1 ITEM NOMENCLATURE
STANDARD MISSILE (SM-2 MR/ER) A2FE BLI:223400

Program Element for Code B Items:

Other Related Program Elements

	FY2001 and Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	10,556	A	96	93	75	75	75	75	94	110	438	11,687
COST ($M)	$7,187.0	A	$155.4	$153.4	$148.3	$150.7	$153.2	$156.0	$178.7	$201.5	$822.8	$9,307.0
Initial Spares ($M)	$189.0	A	$12.6	$11.3	$10.5	$21.5	$27.3	$22.1	$15.9	$16.3	$73.8	$400.3

(U) PROGRAM OVERVIEW;

(U) The STANDARD Missile SM-2 Medium Range (MR) and Extended Range (ER) are solid-propellant, tail-controlled surface-to-air missiles which are the main air defense battery for AEGIS guided missile cruisers and destroyers. The SM-2 Block IIIB, SM-2 Block IV and earlier variants are currently deployed.

(U) Continually being upgraded to preserve battle group effectiveness against evolving cruise missile and Tactical Ballistic Missile (TBM) threats, SM-2 has improvements which will be procured for AEGIS cruisers and destroyers equipped with the MK41 Vertical Launch System (VLS). The SM-2 Block IIIB configuration improves the Block IIIA baseline through the Missile Homing Improvement Program (MHIP) to address a specific type of deployed threat. SM-2 Block IV, with a new separable booster, evolved from the Block IIIA baseline missile to provide greater kinematic capability and dramatic increases in performance. The SM-2 Block IVA was a product improvement to the Block IV missile to provide a near term capability against TBMs with an objective of maintaining the current Block IV AAW capability. The SM-2 Block IVA program was cancelled beginning in FY02.

(U) Beginning in FY02 Vertical Launching System (VLS) canister procurement funding was transferred from Other Missile Support (BLI 229000) into the STANDARD Missile program (BLI 223400). The canisters are used as a storage/shipping container for missiles ashore and as the magazine and firing tube aboard ship. In order to support the operating forces, it is necessary to have sufficient encanisterized missiles on hand to fill the logistic pipeline associated with the Combat Logistics Force (CLF) transportation times and mobilization considerations. To accomplish this, one canister is required for every VLS missile variant that is procured.

NOTE: No ERF,D funding.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **STANDARD MISSILE (SM-2 MR/ER)/A2FE** **BLI: 223400**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	2001 &Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Qty	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Missile Hardware														
FE001	GC&A/MK 72														
	AEGIS BLK IIIB		369	96*	584.52	56,114	93***	730.92	67,976	75	765.07	57,381	75	778.89	58,417
	AEGIS BLK IV		160			0						0			0
	AEGIS BLK IVA		22	0	-	0	0	-	0	0	-	0	0	-	0
FE009	MK104 DTRM Mod 2			96	89.29	8,571	93	91.14	8,476	75	92.81	6,961	75	94.55	7,091
FE009	MK104 DTRM Mod 3			0	-	0	0	-	0	0	-	0	0	-	0
FE003	MK 54 S&A Device			96	9.09	873	93	10.12	941	75	10.29	772	75	10.48	786
FE005	MK 45 TDD Mod 9/Mod 14			Var**	Var **	5,699	93	111.01	10,324	75	110.50	8,288	75****	118.00	8,850
FE006	MK 125 Warhead			96	19.72	1,893	93	19.96	1,856	75	20.32	1,524	75	20.70	1,553
FE007	TYPE I CANISTERS - SM-2 BLK IIIB (MK-13)			96	36.10	3,466	93	36.39	3,384	75	36.32	2,724	75	36.98	2,774
	Total Missile Hardware					**76,616**			**92,957**			**77,650**			**79,471**
	Procurement Support														
FE830	Contract Engineering					29,854			15,563			16,247			16,096
FE830	Government In-House Engineering					4,352			4,451			4,504			4,561
FE840	Quality Assurance					1,413			1,513			2,332			2,817
FE954	Documentation					1,222			1,524			2,259			2,388
FE955	Production Proof					9,119			4,327			5,110			5,961
FE860	Eval Svc & Mat'l					9,825			10,146			9,994			10,052
FE957	Containers					385			381			375			380
FE950	Tools and Test Equipment					4,654			5,584			9,872			9,749
FE850	Comp Improv					9,071			3,851			4,191			4,239
	Total Procurement Support					**69,895**			**47,340**			**54,884**			**56,243**
	Fleet Support														
FE970	Installation and Checkout Equip					1,384			3,939			5,465			5,972
FE971	Special Handling Equip					15			278			436			471
FE972	Training Material Exp and Non Exp					6,221			6,994			7,672			6,556
FE973	Fleet Documentation					569			923			1,069			1,059
FE980	ILS					726			998			1,132			926
	Total Fleet Support					**8,915**			**13,132**			**15,774**			**14,984**
	Modifications					34,887			55,088			50,836			51,946
	Initial Spares					12,608			11,354			10,495			21,503

* FY02 SM-2 Blk IIIB GC&A unit price includes Plate 1 Government Furnished Equipment (GFE) and Life-of-Type buys for Radomes and Integrated circuits. FY03 and out year SM-2 Blk IIIB GC&A prices reflect no GFE.
** FY02 MK 45 TDD cost includes a mix of TDD assembly kits, new TDDs, MK 45 clutter parts for Class I ECP incorporation and royalty fees. Excess TDDs in inventory were utilized with assembly kits.
*** FY03 SM-2 Blk IIIB GC&A unit price includes Inertial Instrumentation Unit/Electronic Assembly Value Engineering Change Proposal (VECP) incorporation.
**** Beginning in FY05 the MK 45 TDD will transition from General Dynamics (formerly Motorola) to Raytheon (Mod 14).

NOTE: The total line does not include Modifications or Initial Spares.

	7,187,023			**155,426**			**153,429**			**148,308**			**150,698**

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **STANDARD MISSILE (SM-2 MR/ER)/A2FE** **BLI: 223400**

COST CODE	ELEMENT OF COST	FY 2006			FY 2007			FY 2008			FY 2009			To Complete		Total	
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost
	Missile Hardware																
FE001	GC&A/MK 72																
	AEGIS BLK IIIB	75	793.27	59,495	75	808.02	60,602	94	802.71	75,455	110	803.41	88,375	438	352,069	1,500	
	AEGIS BLK IV			0			0			0			0	0	0	160	
	AEGIS BLK IVA	0	-	0	0	-	0	0	-	0	0		0	0	0	22	
FE009	MK104 DTRM MOD 2	75	96.35	7,226	75	98.18	7,363	94	100.04	9,404	110	101.94	11,214	438	46,807		
FE009	MK104 DTRM MOD 3	0	-	0	0	-	0	0	-	0	0		0	0	0		
FE003	MK 54 S&A Device	75	10.68	801	75	10.87	816	94	11.08	1,041	110	11.28	1,241	438	5,173		
FE005	MK 45 TDD MOD 14	75	121.81	9,136	75	123.87	9,290	94	125.95	11,839	110	128.02	14,082	438	59,763		
FE006	MK 125 Warhead	75	21.10	1,582	75	21.50	1,612	94	21.91	2,059	110	22.32	2,455	438	10,249		
FE007	TYPE I CANISTERS - SM-2 BLK IIIB (MK-13)	75	36.95	2,771	75	37.62	2,821	94	38.33	3,603	110	39.06	4,296	438	17,934		
	Missile Hardware Total			**81,011**			**82,504**			**103,401**			**121,663**		**491,995**		
	Procurement Support																
FE830	Contract Engineering			16,427			16,480			16,074			16,247				
FE830	Government In-House Engineering			4,648			4,803			4,903			4,438				
FE840	Quality Assurance			3,084			3,214			3,280			2,942				
FE954	Documentation			2,307			2,359			2,414			2,468				
FE955	Production Proof			5,589			5,834			5,959			6,479				
FE860	Eval Svc & Mat'l			10,743			9,539			10,038			10,655				
FE957	Containers			348			346			353			360				
FE950	Tools and Test Equipment			10,037			10,880			10,998			12,206				
FE850	Comp Improv			4,038			4,671			5,380			5,686				
	Procurement Support Total			**57,221**			**58,126**			**59,399**			**61,481**		**257,598**		
	Fleet Support																
FE970	Installation and Checkout Equip			6,266			6,235			6,379			8,554				
FE971	Special Handling Equip			486			481			506			516				
FE972	Training Material Exp and Non Exp			6,002			6,426			6,555			6,679				
FE973	Fleet Documentation			1,149			1,177			1,305			1,431				
FE980	ILS			1,031			1,064			1,187			1,210				
	Fleet Support Total			**14,934**			**15,383**			**15,932**			**18,390**		**73,207**		
	Modifications			53,244			54,175			55,399			49,600		13,629		
	Initial Spares			27,282			22,059			15,928			16,269		73,800		
	NOTE: The total line does not include Modifications or Initial Spares																
				153,166			**156,013**			**178,732**			**201,534**	**438**	**822,800**	**11,687**	**9,307,129**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy/BA-2	C. P-1 ITEM NOMENCLATURE: STANDARD MISSILE	BLI: 223400	SUBHEAD: A2FE

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
UNIQUE SM-2 MR/ER HARDWARE										
FE001 GC&A/MK72 BOOSTER										
FY02 BLK IIIB AEGIS	96	584.52*	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	07/02	01/04	YES	
FY03 BLK IIIB AEGIS	93	730.92**	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	12/02	01/05	YES	
FY04 BLK IIIB AEGIS	75	765.07	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	01/04	01/06	YES	
FY05 BLK IIIB AEGIS	75	778.89	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	01/05	01/07	YES	
FE009 DTRM MK104										
FY02 MOD 2	96	89.29	NAVSEA		SS/FFP	ARC - Camden, AR	08/02	10/03	YES	
FY03 MOD 2	93	91.14	NAVSEA		SS/FFP	ARC - Camden, AR	03/03	10/04	YES	
FY04 MOD 2	75	92.81	NAVSEA		SS/FFP	ARC - Camden, AR	03/04	10/05	YES	
FY05 MOD 2	75	94.55	NAVSEA		SS/FFP	ARC - Camden, AR	03/05	10/06	YES	
FE007 TYPE I CANISTERS (MK-13)										
FY02	96	36.10	NAVSEA		FP/Option	UDLP - Minneapolis, MN	03/02	01/03	YES	
FY03	93	36.39	NAVSEA		SS/FP	UDLP - Minneapolis, MN	02/03	01/04	YES	
FY04	75	36.32	NAVSEA		FP/Option	UDLP - Minneapolis, MN	01/04	01/05	YES	
FY05	75	36.98	NAVSEA		FP/Option	UDLP - Minneapolis, MN	01/05	01/06	YES	

D. REMARKS

* FY02 SM-2 Blk IIIB GC&A unit price includes Plate 1 Government Furnished Equipment (GFE) and Life -of-Type buys for Radomes and Integrated Circuits. The FY03-05 SM-2 Blk IIIB GC&A prices reflect no GFE.

** FY03 SM-2 Blk IIIB GC&A unit price includes Inertial Instrumentation Unit/Electronic Assembly Value Engineering Change Proposal (VECP) incorporation.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | Weapon System | **A. DATE** February 2003

B. APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2

C. P-1 ITEM NOMENCLATURE
STANDARD MISSILE **BLI: 223400**

SUBHEAD **A2FE**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
COMMON HARDWARE										
FE003 SAFETY & ARMING DEVICE										
FY02 MK54	96	9.09	NAVSEA		SS/FFP	KAMAN - Middletown, CT	08/02	10/03	YES	
FY03 MK54	93	10.12	NAVSEA		SS/FFP	KAMAN - Middletown, CT	03/03	10/04	YES	
FY04 MK54	75	10.29	NAVSEA		SS/FFP	KAMAN - Middletown, CT	03/04	10/05	YES	
FY05 MK54	75	10.48	NAVSEA		SS/FFP	KAMAN - Middletown, CT	03/05	10/06	YES	
FE005 ORDNANCE MK45 TDD										
FY02 MOD 9	Various *	Various *	NAVSEA		MYP/SS/FFP	GD - Scottsdale, AZ	03/02	10/03	YES	
FY03 MOD 9	93	111.01	NAVSEA		MYP/SS/FFP	GD - Scottsdale, AZ	12/02	10/04	YES	
FY04 MOD 9	75	110.50	NAVSEA		MYP/SS/FFP	GD - Scottsdale, AZ	03/04	10/05	YES	
FY05 MOD 14 **	75	118.00	NAVSEA		SS/FFP/AF	RAYCO -Tucson, AZ	03/05	10/06	YES	
FE006 WARHEAD MK125										
FY02 MK 125	96	19.72	NAVSEA		SS/FFP	AlliantTech - Magna, UT	08/02	10/03	YES	
FY03 MK 125	93	19.96	NAVSEA		SS/FFP	AlliantTech - Magna, UT	04/03	10/04	YES	
FY04 MK 125	75	20.32	NAVSEA		SS/FFP	AlliantTech - Magna, UT	04/04	10/05	YES	
FY05 MK 125	75	20.70	NAVSEA		SS/FFP	AlliantTech - Magna, UT	04/05	10/06	YES	

D. REMARKS

* FY02 MK 45 TDD procurement includes a mix of TDD assembly kits, new TDDs, MK 45 clutter parts for Class I ECP incorporation and royalty fees. Excess TDDs in inventory were utilized with assembly kits.

** Beginning in FY05 the MK 45 TDD will transition from General Dynamics (formerly Motorola) to Raytheon (Mod 14).

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21						DATE **February 2003**					
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY/BA-2**				Weapon System		P-1 ITEM NOMENCLATURE **Standard Missile/2234**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
SM-2 Round Assembly *	Raytheon, Tucson, AZ	156	175	500	-	3	24	24	27	EA	
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA	
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA	
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA	
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA	
TYPE I & TYPE II Canisters**	UDLP, Minneapolis, MN	120	330	480	3	3	18	18	21	EA	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004										
						CY 2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	1998		88	68	20									5	5	5	5													
RAYCO (FMS)	1998		15	15	0																									
RAYCO	1999		114	70	44	1												8	8	9	9	9								
RAYCO(FMS)	1999		16	16	0																									
RAYCO ***	2000		75	1	74	9	8	0	0	0	11	11	11	12	12															
RAYCO (FMS)	2000		89	44	45	4	8	0	0	0	6	6	7	7	7															
RAYCO ***	2001		75	0	75											14	14	14	14	14	5									
RAYCO (FMS)	2001		48	0	48											9	9	9	9	9	3									
RAYCO	2002		96	0	96																5	7	9	9	9	9	9	9	9	21
RAYCO(FMS)	2002		64	0	64																3	5	6	6	6	6	6	6	6	14

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2005												FISCAL YEAR 2006										
						CY 2004			CALENDAR YEAR 2005										CALENDAR YEAR 2006										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	2002		96	75	21	7	7	7																						
RAYCO(FMS)	2002		64	50	14	6	5	3																						
RAYCO	2003		93	0	93				8	8	8	8	8	8	8	8	8	7	7	7										
RAYCO(FMS)	2003		58	0	58				5	5	5	5	5	5	5	5	5	5	4	4										
RAYCO	2004		75	0	75																6	6	7	6	6	7	6	6	6	19
RAYCO(FMS)	2004		30	0	30																2	2	3	3	3	3	3	3	2	6
RAYCO	2005		75	0	75																									75
RAYCO(FMS)	2005		30	0	30																									30
RAYCO	2006		75	0	75																									75
RAYCO(FMS)	2006		30	0	30																									30

Remarks: * These components are also on the STANDARD Missile Modifications (BLI 235600). The production rates apply to both STANDARD Missile BLI 223400 and STANDARD Missile Modifications BLI 235600 components.

** Canister Minimum Sustaining Rate is met with In-House All Up Round (AURs) and Direct Commercial Sale (DCS) quantities.

*** Deliveries do not include SM-2 Block IVA missiles due to program cancellation.

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY**		Weapon System			P-1 ITEM NOMENCLATURE **Standard Missile/2234**
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
SM-2 Round Assembly *	Raytheon, Tucson, AZ	156	175	500	-	3	24	24	27	EA
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA
TYPE I & TYPE II Canisters **	UDLP, Minneapolis, MN	120	330	480	3	3	18	18	21	EA

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2007												FISCAL YEAR 2008									
						CY 2006			CALENDAR YEAR 2007										CALENDAR YEAR 2008									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	2004		75	56	19	6	6	7																					
RAYCO(FMS)	2004		30	24	6	2	2	2																					
RAYCO	2005		75	0	75				6	6	7	6	6	7	6	6	6	6	6	7									
RAYCO(FMS)	2005		30	0	30				2	2	3	3	3	3	3	3	2	2	2	2									
RAYCO	2006		75	0	75																6	6	7	6	6	7	6	6	6	19
RAYCO(FMS)	2006		30	0	30																2	2	3	3	3	3	3	3	2	6
RAYCO	2007		75	0	75																									75
RAYCO(FMS)	2007		30	0	30																									30
RAYCO	2008		94	0	94																									94
RAYCO(FMS)	2008		30	0	30																									30

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2009												FISCAL YEAR 2010									
						CY 2008			CALENDAR YEAR 2009										CALENDAR YEAR 2010									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	2006		75	56	19	6	6	7																					
RAYCO(FMS)	2006		30	24	6	2	2	2																					
RAYCO	2007		75	0	75				6	6	7	6	6	7	6	6	6	6	6	7									
RAYCO(FMS)	2007		30	0	30				2	2	3	3	3	3	3	3	2	2	2	2									
RAYCO	2008		94	0	94																8	8	8	7	8	8	7	8	8	24
RAYCO(FMS)	2008		30	0	30																2	2	3	3	3	3	3	3	2	6
RAYCO	2009		110	0	110																									110
RAYCO(FMS)	2009		30	0	30																									30

Remarks:

* These components are also on the STANDARD Missile Modifications (BLI 235600). The production rates apply to both STANDARD Missile BLI 223400 and STANDARD Missile Modifications BLI 235600 components.

** Canister Minimum Sustaining Rate is met with In-House All Up Round (AURs) and Direct Commercial Sale (DCS) quantities.

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003	
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY**		Weapon System			P-1 ITEM NOMENCLATURE **Standard Missile/2234**	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
SM-2 Round Assembly *	Raytheon, Tucson, AZ	156	175	500	-	3	24	24	27	EA
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA
TYPE I & TYPE II Canisters **	UDLP, Minneapolis, MN	120	330	480	3	3	18	18	21	EA

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2011												FISCAL YEAR 2012												BAL
						CY 2010			CALENDAR YEAR 2011												CALENDAR YEAR 2012										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RAYCO	2008		94	70	24	8	8	8																						
RAYCO(FMS)	2008		30	24	6	2	2	2																						
RAYCO	2009		110	0	110				9	9	9	9	9	9	9	9	10	10	9	9										
RAYCO(FMS)	2009		30	0	30				2	2	3	3	3	3	3	3	2	2	2	2										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2013												FISCAL YEAR 2014												BAL
						CY 2012			CALENDAR YEAR 2013												CALENDAR YEAR 2014										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks: * These components are also on the STANDARD Missile Modifications (BLI 235600). The production rates apply to both STANDARD Missile BLI 223400 and STANDARD Missile Modifications BLI 235600 components.

** Canister Minimum Sustaining Rate is met with In-House All Up Round (AURs) and Direct Commercial Sale (DCS) quantities.

Exhibit P-20, Requirements Study	APPROPRIATION/BUDGET ACTIVITY **WPN/BA-2 OTHER MISSILES**	DATE: **February 2003**
P-1 ITEM NOMENCLATURE **STANDARD Missile SM-2, MR, AEGIS VLS, BLOCK IIIB**	Admin Leadtime (after Oct1): 3 MONTHS	Prod Leadtime : 24 MONTHS

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Buy Summary	**96**	**93**	**75**	**75**	**75**	**75**	**94**	**110**
Unit Cost ($M) *	**0.798**	**1.000**	**1.035**	**1.060**	**1.080**	**1.100**	**1.100**	**1.106**
Total Cost ($M)	**$76.6**	**$93.0**	**$77.7**	**$79.5**	**$81.0**	**$82.5**	**$103.4**	**$121.7**
Asset Dynamics								
Beginning Asset Position	344	543	716	904	1069	1220	1369	1517
Deliveries from all prior year funding	96	103	122	21				
Deliveries from FY 2003 funding				72	21			
Deliveries from FY 2004 funding					56	19		
Deliveries from FY 2005 funding						56	19	
Deliveries from subsequent years' funding							56	75
Other Gains	108	79	76	80	82	79	79	79
Combat Losses/Usage								
Training Losses/Usage	-4	-9	-10	-8	-8	-5	-6	-7
Test Losses/Usage								
Other Losses/Usage	-1							
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	543	716	904	1069	1220	1369	1517	1664
Inventory Objective or Current Authorized Allowance	3219	3907	3989	4110	4276	4319	3530	3515

Inventory Objective FY06 FDP	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2001 Replacement:	Aircraft: TOAI:
Assets Rqd For Combat Loads: 1620	FY 2003 thru Dec 02 : 0	FY 2003 thru Dec 02 : 0	FY 2003 thru Dec 02 : 0	Vehicles Eligible for FY 2003 Replacement:	PAA: TAI
WRM Rqmt: 2648	FY 2002: 4	FY 2001: 0	FY 2001: 0	Vehicle Augment:	Attrition Res:
Pipeline: 0	FY 2001: 8	FY 2000: 0	FY 2000: 0		BAI
Other: 8	FY 2000: 3	FY 1999: 0	FY 1999: 0		Inactive Inv:
TOTAL: 4276	FY 1999: 11				Storage:

Remarks:

* FY02 SM-2 Blk IIIB unit price includes Plate 1 Government Furnished Equipment (GFE) and Life-of-Type buys for radomes and integrated circuits. FY03 and out year SM-2 Blk IIIB unit prices reflect no GFE.

Exhibit P-20, Requirements Study	APPROPRIATION/BUDGET ACTIVITY **WPN/BA-2 OTHER MISSILES**	DATE: **February 2003**
P-1 ITEM NOMENCLATURE **STANDARD Missile, SM-2, MR, AEGIS VLS, BLOCK IV**	Admin Leadtime (after Oct1): 3 MONTHS	Prod Leadtime : 24 MONTHS

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Buy Summary	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Unit Cost ($K)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total Cost ($K)	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Asset Dynamics								
Beginning Asset Position	56	56	70	107	101	95	89	83
Deliveries from all prior year funding	2	20	43					
Deliveries from FY 2003 funding								
Deliveries from FY 2004 funding								
Deliveries from FY 2005 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage	-1	-6	-6	-6	-6	-6	-6	-6
Test Losses/Usage								
Other Losses/Usage	-1							
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	56	70	107	101	95	89	83	77
Inventory Objective or Current Authorized Allowance *								

Inventory Objective FY04 FDP	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2001 Replacement:	Aircraft: TOAI:
Assets Rqd For Combat Loads:	FY 2003 thru Dec 02: 1	FY 2003 thru Dec 02: 0	FY 2003 thru Dec 02: 0	Vehicles Eligible for FY 2003 Replacement:	PAA: TAI
WRM Rqmt:	FY 2002: 1	FY 2001: 0	FY 2001: 0	Vehicle Augment:	Attrition Res:
Pipeline:	FY 2001: 3	FY 2000: 0	FY 2000: 0		BAI
Other:	FY 2000: 2	FY 1999: 0	FY 1999: 0		Inactive Inv:
TOTAL:	FY 1999: 3				Storage:

Remarks:

* No BLK IV Inventory Objective (IO) was established. A decision was made to cease production of the BLK IV after the LRIP procurement of 160 units due to the development of the BLK IVA follow-on. Block IVA was cancelled December 2001.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **FEBRUARY 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2

P-1 ITEM NOMENCLATURE
ROLLING AIRFRAME MISSILE (RAM) 224200

Program Element for Code B Items: 0604756N

Other Related Program Elements

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY08	FY09	To Complete	Total Program
QUANTITY	235	B	90	106*	90	90	90	90	90	156	1,034	1965
COST ($M)	$133.7		$46.4	$64.1	$48.3	$47.5	$136.2	$70.9	$99.6	$102.4	$555.7	$1,304.8
Initial Spares ($M)			$2.2	$1.1	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	cont	$3.4
Vendor Direct Spares ($M)			$0.9	$4.9	$0.4	$0.4	$0.0	$0.6	$1.0	$1.0	cont	$9.3

ITEM DESCRIPTION/JUSTIFICATION:
Rolling Airframe Missile (RAM) is a high fire-power, low cost, lightweight ship self-defense system to engage anti-ship missiles. Block 1 adds the capability of Infrared all-the-way guidance while maintaining the original dual-mode passive Radio Frequency/Infrared (RF/IR) guidance (Block 0). The RAM missile is fired from a RAM Guided Missile Launching System (MK-49), which holds 21 RAM rounds. Approval for full rate Block 1 production, Milestone III was granted on 20 January 2000.

FY02 funds will procure 90 Block 1 Missiles.
FY03 funds will procure 106* Block 1 Missiles and 50 Block 1 ORDALTs.
FY04 funds will procure 90 Block 1 missiles and 5 Block 1 ORDALTs.
FY05 funds will procure 90 Block 1 Missiles.

COOPERATIVE AGREEMENTS:
RAM is a NATO cooperative project with the Federal Republic of Germany. The RAM Production MOU, approved and signed by the U.S. and Germany (GE) on 3 August 1987, specifies production procedures for the Guided Missile Round Pack and coproduction of the Guided Missile Launching System. Missile limited production contracts were awarded to U.S. (General Dynamics/Air Defense Systems Division) and German (RAM System GmbH) sources in 1989. As a result of the reduced U.S. missile quantities and a desire to maintain production capabilities in both countries, an arrangement between the U.S. and German producers, for single source coproduction of the German full-rate production quantities, was approved by both governments in November 1992 and this arrangement continues for U.S. rate production. In August 1992, the acquisition of General Dynamics by Hughes Aircraft Company was approved, making Hughes Missile Systems Co. the U.S. prime contractor. In January 1998, Raytheon acquired Hughes Missile Systems Co., making Raytheon the U.S. prime contractor. The U.S. and Federal Republic of Germany signed a new Block 1 Production MOA on 18 December 2001 to cooperatively produce Block 1 missiles, launchers and ORDALTs.

*FY 2003 President's Budget requested $58.4 million for the procurement of 90 RAM Block 1 missiles. An additional $7 million was appropriated for the procurement of 16 more missiles.

WEAPONS PROCUREMENT, NAVY
FY 2004/05 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

	APPROPRIATION/BUDGET ACTIVITY:	ID CODE	P-1 ITEM NOMENCLATURE/SUBHEAD	DATE:
	WEAPONS PROCUREMENT, NAVY/BA-2		ROLLING AIRFRAME MISSILE (RAM) BLI - 224200	FEBRUARY 2003

COST		FY 2002			FY 2003			FY 2004			FY 2005		
CODES	ELEMENT OF COST	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Missile Hardware												
EF001	BLOCK 1 & G&CA	90	374.1	33,667	106	322.5	34,184	90	344.7	31,023	90	347.2	31,248
EF001	GMRP ORDALTS				50	186.8	9,338	5	211.2	1,056			
EF850	COMPONENT IMPR			2,700			5,021			2,535			1,777
EF002	PROPULSION	90	9.7	887	106	11.3	1,195	90	11.5	1,038	90	11.8	1,062
EF005	ORDNANCE PACK	90	22.9	2,064	106	27.7	2,932	90	28.4	2,556	90	28.9	2,601
EF006	WARHEAD	60	4.6	275	76	7.6	576	60	7.8	465	65	7.9	515
EF004	SAFE & ARM DEV	60	2.0	119	60	2.0	118	60	2.8	168	65	3.0	195
EF010	TELEMETER	30	22.2	667	30	36.2	1,087	30	36.7	1,101	25	37.5	939
	Total Hardware			**40,379**			**54,451**			**39,942**			**38,336**
	Procurement Support												
EF830	CONTRACTOR EN			492			1,897			1,385			1,403
EF830	GOVT INHOUSE EN			2,802			3,225			2,844			4,084
EF860	PRODUCT ACCEPT			60			256			233			236
	Total Procurement Support			**3,354**			**5,378**			**4,462**			**5,723**
	MISSILE Flyaway Cost	90	485.9	43,733	106	467.8	49,588	90	481.6	43,344	90	489.6	44,064
	GMRP ORDALT Flyaway Cost				50	224.7	11,235	5	211.2	1,291			
	Fleet Support												
EF974	ILS						454			504			520
EF957	CONTAINER				150	3.6	540	150	3.6	540			
EF007	CANISTER	90	29.8	2,683	106	30.4	3,304	90	31.9	2,867	90	32.6	2,930
	Total Fleet Support			**2,683**			**4,298**			**3,911**			**3,450**
	Weapon System Cost			**46,416**			**64,127**			**48,315**			**47,510**
	Modifications												
	Initial Spares			2,244			1,137			0			0
	Vendor Direct Spares			926			4,906			423			418
	Total Program Cost			**49,586**			**70,170**			**48,738**			**47,928**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE FEBRUARY 2003		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)				SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF001 GUIDANCE & CONTROL ASSEMBLY										
FY 2002										
BLOCK 1 MISSILE	90	374.1	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	4/02	4/04	YES	
FY 2003										
BLOCK 1 MISSILE	106	22.5	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	12/02	10/04	YES	
FY 2004										
BLOCK 1 MISSILE	90	344.7	NAVSEA	5/03	SS/FP	RAYTHEON, TUCSON,AZ	11/03	10/05	YES	
FY 2005										
BLOCK 1 MISSILE	90	347.2	NAVSEA	5/04	SS/FP	RAYTHEON, TUCSON,AZ	11/04	10/06	YES	
EF001 GMRP ORDALTS										
FY 2003	50	186.8	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	12/02	10/04	YES	
FY 2004	5	211.2	NAVSEA	5/03	SS/FP	RAYTHEON, TUCSON,AZ	11/03	10/05	YES	
EF02 PROPULSION ROCKET MOTOR MK112/1 ARMING & FIRING DEVICE MK298/1										
FY 2002	90	9.7	NAVSEA	5/01	C/FP	COMPETITIVE	8/02	10/03	YES	
FY 2003	106	11.3	NAVSEA	5/02	C/FP	COMPETITIVE	11/02	07/04	YES	
FY 2004	90	11.5	NAVSEA	5/03	C/FP	COMPETITIVE	11/03	07/05	YES	
FY 2005	90	11.8	NAVSEA	5/04	C/FP	COMPETITIVE	11/04	07/06	YES	
EF005 ORDNANCE PACKAGE TARGET DETECT MK20										
FY 2002	90	22.9	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	4/02	4/04	YES	
FY 2003	106	27.7	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	12/02	10/04	YES	
FY 2004	90	28.4	NAVSEA	5/03	SS/FP	RAYTHEON, TUCSON,AZ	11/03	10/05	YES	
FY 2005	90	28.9	NAVSEA	5/04	SS/FP	RAYTHEON, TUCSON,AZ	11/04	10/06	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE FEBRUARY 2003		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)				SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF006										
WARHEAD WDU 17/8										
FY 2002	60	4.6	NAVAIR	5/01	C/FP	ENSIGN BICKFORD	2/02	10/03	YES	
FY 2003	76	7.6	NAVAIR	5/02	C/FP	COMPETITIVE	1/03	07/04	YES	
FY 2004	60	7.7	NAVAIR	5/03	C/FP	COMPETITIVE	11/03	7/05	YES	
FY 2005	65	7.9	NAVAIR	5/04	C/FP	COMPETITIVE	11/04	7/06	YES	
EF004										
SAFE & ARMS MK 13/2										
FY 2002	60	2.0	NAVAIR	7/01	C/FP	RAYMOND ENGINEERS	12/01	07/03	YES	
FY 2003	60	2.0	NAVSEA	7/02	C/FP	CHINA LAKE	12/02	07/04	YES	
FY 2004	60	2.8	NAVAIR	7/03	C/FP	COMPETITIVE	11/03	07/05	YES	
FY 2005	65	3.0	NAVAIR	7/04	C/FP	COMPETITIVE	11/04	07/06	YES	
EF010										
TELEMETER										
FY 2002	30	22.2	NAVSEA	5/01	SS/FP	CHINA LAKE	11/01	7/03	YES	
FY 2003	30	36.2	NAVSEA	5/02	SS/FP	CHINA LAKE	11/02	7/04	YES	
FY 2004	30	36.7	NAVSEA	5/03	SS/FP	CHINA LAKE	11/04	7/06	YES	
FY 2005	25	37.5	NAVSEA	5/04	SS/FP	CHINA LAKE	11/05	7/07	YES	
EF957										
CONTAINERS										
FY 2003	150	3.6	NAVSEA	5/02	C/FP	COMPETITIVE	3/03	11/03	YES	
FY 2004	150	3.6	NAVSEA	5/03	C/FP	COMPETITIVE	12/03	8/04	YES	
EF007										
CANISTER										
FY 2002	90	29.8	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	4/02	4/04	YES	
FY 2003	106	30.4	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	11/02	10/04	YES	
FY 2004	90	31.9	NAVSEA	5/03	SS/FP	RAYTHEON, TUCSON,AZ	11/03	10/05	YES	
FY 2005	90	32.6	NAVSEA	5/04	SS/FP	RAYTHEON, TUCSON,AZ	11/04	10/06	YES	

D. REMARKS

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21 | DATE **FEBRUARY 2003**

APPROPRIATION/BUDGET ACTIVITY: **WEAPONS PROCUREMENT, NAVY BA-2** | Weapon System | P-1 ITEM NOMENCLATURE **ROLLING AIRFRAME MISSILE (RAM)**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
5" Rolling Airframe Missle	Raytheon Company	90	20	480	0	3	24	24	24	Months
	Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									2002			CALENDAR YEAR 2003								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5" Rolling Airframe Missile/RC	02	N	90		90							A																	90
5" Rolling Airframe Missile/RC	03	N	106		106															A									90

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004									2004			CALENDAR YEAR 2005								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5" Rolling Airframe Missile/RC	02	N	90		90							15	15	15	15	15	15												0
5" Rolling Airframe Missile/RC	03	N	106		106													9	9	9	9	9	9	9	9	9	9	8	8	0
5" Rolling Airframe Missile/RC	04	N	90		90		A																							90
5" Rolling Airframe Missile/RC	05	N	90		90														A											90

Remarks:

DD Form 2445, JUL 87 Previous editions are obsolete

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FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21 — DATE **FEBRUARY 2003**

APPROPRIATION/BUDGET ACTIVITY: **WEAPONS PROCUREMENT, NAVY BA-2** — Weapon System — P-1 ITEM NOMENCLATURE: **ROLLING AIRFRAME MISSILE (RAM)**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
5" Rolling Airframe Missile	Raytheon Company	90	20	480	0	3	24	24	24	Months
	Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005			CALENDAR YEAR 2006									2006			CALENDAR YEAR 2007									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
																													0
5" Rolling Airframe Missile/RC	04	N	90		90	7	8	7	8	7	8	7	8	7	8	7	8												0
5" Rolling Airframe Missile/RC	05	N	90		90													7	8	7	8	7	8	7	8	7	8	7	8	0
5" Rolling Airframe Missile/RC	06	N	90		90		A																						90
5" Rolling Airframe Missile/RC	07	N	90		90														A										90

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009										BAL
						2007			CALENDAR YEAR 2008									2008			CALENDAR YEAR 2009									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5" Rolling Airframe Missile/RC	05	N	90		90																								0
5" Rolling Airframe Missile/RC	06	N	90		90	7	8	7	8	7	8	7	8	7	8	7	8												0
5" Rolling Airframe Missile/RC	07	N	90		90													7	8	7	8	7	8	7	8	7	8	7	8	0
5" Rolling Airframe Missile/RC	08	N	90		90		A																						90
5" Rolling Airframe Missile/RC	09	N	156		156														A										156

Remarks:

DD Form 2445, JUL 87 — Previous editions are obsolete

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P-1 SHOPPING LIST
ITEM NO 12 PAGE NO 6

Exhibit P-21 Production Schedule

FY 2004 PRESIDENT'S BUDGET SUBMISSION

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2; OTHER MISSILES

P-1 ITEM NOMENCLATURE
228000 AERIAL TARGETS (J2EM) **PE: 0204228N / 0204162N**

Program Element for Code B Items:
0604258N, 0605130D, 0604366N

Other Related Program Elements
N/A

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)	$2,765.9	A	$57.8	$69.0	$70.7	$103.7	$127.7	$88.6	$90.2	$91.9	Cont.	Cont.

PROGRAM COVERAGE:

The Aerial Targets Program provides powered targets, towed targets and necessary Target Auxiliary and Augmentation Systems (TA/AS) equipment for fleet training, and weapons systems test and evaluation. This program is comprised of a series of continuing target production programs.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

In Fiscal Year 2004/2005, major efforts include the continued procurement of Sub-Sonic Aerial Targets (SSAT), Supersonic Sea Skimming Targets (SSST) and TDU-32 Tow Targets. Continued TA/AS procurements include target command/control equipment, scoring equipment, location and identification equipment, navigation equipment, electronic countermeasures equipment, active emitter augmentation equipment and target control systems. The aerial targets and necessary TA/AS equipment provided from this program supports Navy air-to-air and surface-to-air training and weapons systems DT/OT testing.

WEAPONS SYSTEM COST ANALYSIS P-5											B. DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY** **BA-2 OTHER MISSILES**					P-1 ITEM NOMECLATURE/SUBHEAD **228000 AERIAL TARGETS/J2EM**						
COST CODE	ELEMENT OF COST	IDENT CODE	Prior Years Total Cost	FY 2002		FY 2003		FY 2004		FY 2005	
				QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
EM020	Anti-Air Warfare Target	A	$175,470								
EM030	Subsonic Aerial Target	A	$427,342	126	$36,861	76	$26,674	94	$31,875	124	$44,280
EM200	OTHER TARGETS (2)	A	$142,710		$3,079		$26,555		$20,879		$43,633
EM300	TA/AS	A	$202,882		$17,823		$15,756		$17,922		$15,771
	VARIOUS		$1,817,484		$0		$0		$0		$0
	TOTAL		**$2,765,888**	**126**	**$57,763**	**76**	**$68,985**	**94**	**$70,676**	**124**	**$103,684**
SPARES (1)											
	Anti-Air Warfare Target		$0		$0		$0		$0		$0
	Subsonic Aerial Target		$455		$0		$0		$0		$0
	OTHER TARGETS		$703		$0		$0		$0		$366
	TA/AS		$992		$300		$384		$833		$1,002
	VARIOUS		$53,947		$0		$0		$0		$0
	TOTAL SPARES		$56,097		$300		$384		$833		$1,368
	TOTAL PROGRAM		**$2,821,985**	**126**	**$58,063**	**76**	**$69,369**	**94**	**$71,509**	**124**	**$105,052**

(1) Initial spares requirements are displayed for information purposes only and are budgeted in Budget Activity 6, Spare and Repair Parts.

(2) Quantities are not displayed here because multiple types of targets are included in the line. Target quantities are identified on the detailed P-5 for "Other Targets".

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **February 2003**

TARGET SYSTEM: **SUBSONIC AERIAL TARGET**	FISCAL YEAR 2002			FISCAL YEAR 2003			FISCAL YEAR 2004			FISCAL YEAR 2005		
MANUFACTURER: NORTHROP-GRUMMAN		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: **EM030** FLYAWAY COST ($000)	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
TARGET	126	$244	$30,698	76	$274	$20,826	94	$262	$24,674	124	$277	$34,348
INSTALL/MISSION KITS			$2,994			$3,639			$3,544			$4,463
TOTAL HARDWARE			**$33,692**			**$24,465**			**$28,218**			**$38,811**
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE			$1,199			$1,375			$1,346			$2,272
DOCUMENTATION			$154			$158			$162			$112
GOVERNMENT TEST			$191			$26			$27			$0
TOTAL RECURRING			**$1,544**			**$1,559**			**$1,535**			**$2,384**
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT			$0			$0			$0			$0
SPECIAL TOOLING AND TEST EQUIPMENT			$0			$0			$0			$0
TOTAL NONRECURRING			**$0**			**$0**			**$0**			**$0**
TOTAL FLYAWAY			**$35,236**			**$26,024**			**$29,753**			**$41,195**
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			$917						$936			$1,828
INSTALL & CHECKOUT			$0			$0			$520			$772
SPECIAL HANDLING EQUIPMENT			$0			$0			$0			$0
FLEET TEST EQUIPMENT			$0			$0			$0			$0
TRAINING DEVICES			$46			$35			$36			$0
DOCUMENTATION			$0			$0			$0			$0
ILS			$662			$615			$630			$485
TOTAL GRD EQUIP/FLEET SUP COST			**$1,625**			**$650**			**$2,122**			**$3,085**
WEAPONS SYSTEM COST			**$36,861**			**$26,674**			**$31,875**			**$44,280**
TARGETS INITIAL SPARES			$0			$0			$0			$0
TOTAL PROGRAM COST			**$36,861**			**$26,674**			**$31,875**			**$44,280**

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **February 2003**

TARGET SYSTEM: **OTHER TARGETS**		FISCAL YEAR 2002			FISCAL YEAR 2003			FISCAL YEAR 2004			FISCAL YEAR 2005		
MANUFACTURER: **VARIOUS**	Prior Yrs		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: **EM200** FLYAWAY COST ($000)	Total Cost	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:													
Supersonic Sea Skimming Target (SSST)	$36,517	0	$0	$0	17	$1,142	$19,417	15	$1,174	$17,611	45	$872	$39,222
INSTALL/MISSION KITS					17	$17	$281	15	$17	$255	45	$19	$845
FOREIGN NDI - SUPERSONIC	$725			$0	0		$0			$0			$0
FOREIGN NDI - SUBSONIC	$0			$0	0		$0			$0			$0
TOW TARGETS	$5,492	500	$3.02	$1,508	500	$3.14	$1,568	500	$3.20	$1,601	500	$3.28	$1,639
SM-2 TARGET	$2,000			$0			$0			$0			$0
MQM-8G(EER) VANDAL	$67,370			$0			$0			$0			$0
TOTAL HARDWARE	**$112,104**			**$1,508**			**$21,266**			**$19,467**			**$41,706**
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	$13,707			$1,271			$1,101			$1,369			$1,882
DOCUMENTATION	$1,039			$0			$0			$0			$0
GOVERNMENT TEST	$300			$0			$42			$43			$45
TOTAL RECURRING	**$15,046**			**$1,271**			**$1,143**			**$1,412**			**$1,927**
PROCUREMENT SUPPORT (NONRECURRING):*													
GOVERNMENT IN-HOUSE	$0			$0			$425			$0			$0
PRODUCT IMPROVEMENT	$3,726			$0			$0			$0			$0
INSENSITIVE MUNITION HARDWARE	$0			$0			$2,292			$0			$0
CONTRACTOR ENGINEERING	$2,544			$0			$1,223			$0			$0
SPECIAL TOOLING AND TEST EQUIPMENT	$709			$0			$0			$0			$0
TOTAL NONRECURRING	**$6,979**			**$0**			**$3,515**			**$0**			**$0**
TOTAL FLYAWAY	**$134,129**	**0**	**$0**	**$2,779**	**0**	**$0**	**$25,924**	**0**	**$0**	**$20,879**	**0**	**$0**	**$43,633**
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$3,154			$300			$631			$0			$0
INSTALL & CHECKOUT	$0			$0			$0			$0			$0
SPECIAL HANDLING EQUIPMENT	$5			$0			$0			$0			$0
FLEET TEST EQUIPMENT	$968			$0			$0			$0			$0
TRAINING DEVICES	$64			$0			$0			$0			$0
DOCUMENTATION	$1,665			$0			$0			$0			$0
ILS	$2,725			$0			$0			$0			$0
TOTAL GRD EQUIP/FLEET SUP COST	**$8,581**			**$300**			**$631**			**$0**			**$0**
WEAPONS SYSTEM COST	**$142,710**			**$3,079**			**$26,555**			**$20,879**			**$43,633**
TARGETS INITIAL SPARES	$703			$0			$0			$0			$366
TOTAL PROGRAM COST	**$143,413**			**$3,079**			**$26,555**			**$20,879**			**$43,999**

* FY 2003 includes non-recurring cost for Insensitive Munitions Test/Certification.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **February 2003**

TARGET SYSTEM: **TA/AS** MANUFACTURER: **VARIOUS** COST CODE: **EM300** FLYAWAY COST ($000)	Prior Yrs Total Cost	FISCAL YEAR 2002 QTY	UNIT COST	TOTAL COST	FISCAL YEAR 2003 QTY	UNIT COST	TOTAL COST	FISCAL YEAR 2004 QTY	UNIT COST	TOTAL COST	FISCAL YEAR 2005 QTY	UNIT COST	TOTAL COST
HARDWARE:													
CMD/CONTROL EQUIPMENT	$33,790			$2,383			$3,600			$3,600			$3,000
SCORING EQUIPMENT	$20,701			$1,952			$450			$1,990			$881
LOCATION/ID EQUIPMENT	$15,074			$1,090			$558			$965			$1,070
ECM/EMITTER EQUIPMENT	$49,016			$5,549			$4,946			$5,115			$4,705
AUGMENTATION/NAVIGATION EQUIPMENT	$11,152			$661			$674			$773			$604
INSTALL/MISSION EQUIPMENT	$2,993			$583			$582			$598			$605
MOBILE SEA RANGE	$12,868			$0			$0			$0			$0
TOTAL HARDWARE	**$145,594**			**$12,218**			**$10,810**			**$13,041**			**$10,865**
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	$36,264			$4,376			$3,800			$3,719			$3,728
DOCUMENTATION	$264			$100			$100			$100			$100
GOVERNMENT TEST	$327			$55			$60			$61			$62
TOTAL RECURRING	**$36,855**			**$4,531**			**$3,960**			**$3,880**			**$3,890**
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	$1,902			$0			$0			$0			$0
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			$0
TOTAL NONRECURRING	**$1,902**			**$0**			**$0**			**$0**			**$0**
TOTAL FLYAWAY	**$184,351**			**$16,749**			**$14,770**			**$16,921**			**$14,755**
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$631			$256			$174			$177			$180
INSTALL & CHECKOUT	$917			$0			$0			$0			$0
SPECIAL HANDLING EQUIPMENT	$0			$0			$0			$0			$0
FLEET TEST EQUIPMENT	$2,002			$0			$0			$0			$0
TRAINING	$1,074			$215			$200			$200			$200
DOCUMENTATION	$0			$0			$0			$0			$0
ILS	$13,907			$603			$612			$624			$636
TOTAL GRD EQUIP/FLEET SUP COST	**$18,531**			**$1,074**			**$986**			**$1,001**			**$1,016**
WEAPONS SYSTEM COST	**$202,882**			**$17,823**			**$15,756**			**$17,922**			**$15,771**
TARGETS INITIAL SPARES	$992			$300			$384			$833			$1,002
TOTAL PROGRAM COST	**$203,874**			**$18,123**			**$16,140**			**$18,755**			**$16,773**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE: February 2003		
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy/BA-2; Other Missiles					C. P-1 ITEM NOMENCLATURE: 228000 AERIAL TARGETS				SUBHEAD: J2EM	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Subsonic Aerial Target/FY-02	126	244	NAVAIR		C/Option	Northrop-Grumman, Rancho Bernardo, CA	FEB 02	FEB 03		
Subsonic Aerial Target/FY-03	76	274	NAVAIR		C/Option	Northrop-Grumman, Rancho Bernardo, CA	NOV 02	FEB 04		
Subsonic Aerial Target/FY-04	94	262	NAVAIR		C/Option	Northrop-Grumman, Rancho Bernardo, CA	FEB 04	FEB 05		
Subsonic Aerial Target/FY-05	124	277	NAVAIR		SS/FFP	Northrop-Grumman, Rancho Bernardo, CA	FEB 05	FEB 06		
Supersonic Sea Skimming Target										
SSST/FY-03	17	1142	NAVAIR		SS/CPIF	Orbital Sciences, Chandler, AZ	MAR 03	MAY 04		
SSST/FY04	15	1174	NAVAIR		SS/CPIF	Orbital Sciences, Chandler, AZ	JAN 04	JAN 05		
SSST/FY05	45	872	NAVAIR		SS/FFP	Orbital Sciences, Chandler, AZ	JAN 05	JAN 06		

D. REMARKS

CLASSIFICATION:

UNCLASSIFIED

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 - OTHER MISSILES**		Weapon System	P-1 ITEM NOMENCLATURE **AERIAL TARGETS**		
		Production Rate	Procurement Leadtimes		

Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Subsonic Aerial Target	Northrop-Grumman, Rancho	7-8	20	40-45		4	12		16	E
	Bernardo, CA									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003											
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Subsonic Aerial Tgt./NORTHROP-GRU	02	N	126	0	126					A												10	11	12	12	12	12	11	11	35
Subsonic Aerial Tgt./NORTHROP-GRU	02	RIK	3	0	3					A																				3
Subsonic Aerial Tgt./NORTHROP-GRU	03	N	76	0	76														A											76
Subsonic Aerial Tgt./NORTHROP-GRU	03	RIK	1	0	1														A											
Subsonic Aerial Tgt./NORTHROP-GRU	04	N	94	0	94																									94
Subsonic Aerial Tgt./NORTHROP-GRU	05	N	124	0	124																									124

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005											
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Subsonic Aerial Tgt./NORTHROP-GRU	02	N	126	91	35	10	10	9	6																				0
Subsonic Aerial Tgt./NORTHROP-GRU	02	RIK	3	0	3				3																				0
Subsonic Aerial Tgt./NORTHROP-GRU	03	N	76	0	76					6	6	6	6	6	6	6	6	7	7	7	7								0
Subsonic Aerial Tgt./NORTHROP-GRU	03	RIK	1	0	1																1								0
Subsonic Aerial Tgt./NORTHROP-GRU	04	N	94	0	94					A												9	9	9	8	8	8	8	7	28
Subsonic Aerial Tgt./NORTHROP-GRU	05	N	124	0	124																	A								124

Remarks:

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2003					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER MISSILES**					Weapon System	P-1 ITEM NOMENCLATURE **AERIAL TARGETS**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
Subsonic Aerial Target	Northrop-Grumman, Rancho	7-8	20	40-45		4	12		16	E	
	Bernardo, CA										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005			CALENDAR YEAR 2006										CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Subsonic Aerial Tgt./NORTHROP-GRU	04	N	94	66	28	7	7	7	7																				0
Subsonic Aerial Tgt./NORTHROP-GRU	05	N	124	0	124					10	10	10	10	10	10	10	10	11	11	11	11								0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009										BAL
						2007			CALENDAR YEAR 2006										CALENDAR YEAR 2009										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

CLASSIFICATION:

UNCLASSIFIED

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21						DATE **February 2003**					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 - OTHER MISSILES**				Weapon System		P-1 ITEM NOMENCLATURE **AERIAL TARGETS**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
Supersonic Sea Skimming Tgt.	Boeing, St Louis, MO	N/A	N/A	42+			13			E	
Supersonic Sea Skimming Tgt. 1)	Orbital Sciences, Chandler, AZ	10	40	40		4	12		16	E	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002															CALENDAR YEAR 2003						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SSST/Boeing 2)	99	N	15	0	15	A								1						2	1					3	3	3	2	0
SSST/Boeing 2)	00	N	14	0	14	A																								14
SSST/Boeing 2)	01	N	2	0	2	A																								2
SSST/Orbital Sciences	01	N	10	0	10		A																							10
SSST/Orbital Sciences	03	N	17	0	17																		A							17

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004															CALENDAR YEAR 2005						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SSST/Boeing 2)	00	N	14	0	14	3	3	4	4																					0
SSST/Boeing 2)	01	N	2	0	2					1	1																			0
SSST/Orbital Sciences	01	N	10	0	10			2	2	2	2	2																		0
SSST/Orbital Sciences	03	N	17	0	17								2	2	2	2	2	2	2	3										0
SSST/Orbital Sciences	04	N	15	0	15				A												2	2	2	1	1	1	1	1	1	3
SSST/Orbital Sciences	05	N	45	0	45																A									45

Remarks: 1) The Production Lead Time (PLT) for delivery of EMD Units in FY01 and FY03 is greater than the standard 12 month PLT indicated above. Lead time improvements from 12 to 14 months are due to contracter learning curve improvements during initial production.
2) Delay in delivery of FY99/00/01 procured targets are due to contract restructure and foreign source delivery issues.

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21 | DATE **February 2003**

APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/BA-2 - OTHER MISSILES** | Weapon System | P-1 ITEM NOMENCLATURE: **AERIAL TARGETS**

Item	Manufacturer's Name and Location	Production Rate MSR	Production Rate 1-8-5	Production Rate MAX	Procurement Leadtimes ALT Prior to Oct 1	Procurement Leadtimes ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Supersonic Sea Skimming Tgt.	TBD	N/A	N/A	42+			13			E
Supersonic Sea Skimming Tgt.	Orbital Sciences, Chandler, AZ	10	40	40		4	12		16	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006 / 2005 OCT	NOV	DEC	CALENDAR YEAR 2006 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2007 / CALENDAR YEAR 2007 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
SSST/TBD	04	N	15	12	3	1	1	1																						0
SSST/TBD	05	N	45	0	45				4	4	4	4	4	4	4	4	4	3	3	3										0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008 / 2007 OCT	NOV	DEC	CALENDAR YEAR 2008 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2009 / CALENDAR YEAR 2009 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/BA-2/OTHER MISSILES**								P-1 ITEM NOMENCLATURE: **DRONES AND DECOYS (J2DJ)**				
Program Element for Code B Items: **N/A**								Other Related Program Elements: **N/A**				
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												
COST ($M)	$257.3		$13.8	$13.7	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$284.9

PROGRAM COVERAGE:

Funding for Drones and Decoys from FY 1986 through FY 1993 was used for continued procurements of ADM-141 Tactical Air Launched Decoy (TALD) units, which are non-powered, glide trajectory driven vehicles. The ADM-141 TALD is an expendable of similar size to a 500 pound general purpose bomb and is carried similarly. After launched from strike aircraft, the ADM-141 TALD uses radar signature augmentation and preprogrammed flight profiles to simulate manned aircraft. Its mission is to deceive and saturate hostile radar controlled air defenses, thus enhancing strike aircraft survivability. Currently, the F/A-18, F-14 and S-3 are fully qualified to deploy the ADM-141 TALD in both land based and CV operations.

The FY 2003 program includes a Congressional add of $14 million (less Congressional undistributed reductions) for the conversion of 80 Tactical Air Launch Decoys (TALD) to Improved Tactical Air Launch Decoys (ITALD), and the procurement of associated containers.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **February 2003**

TARGET SYSTEM: **ITALD**		FISCAL YEAR 2002			FISCAL YEAR 2003			FISCAL YEAR 2004			FISCAL YEAR 2005		
MANUFACTURER: IIMI LTD, RATAT HASHARON, ISRAEL COST CODE: **DJ010** FLYAWAY COST ($000)	Prior Yrs Total Cost	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
ITALD	$49,361	74	$160	$11,840	80	$149	$11,920	0	$0	$0	0	$0	$0
CONTAINERS	$795		$0	$0	42	$5	$210			$0			$0
TOTAL HARDWARE	**$50,156**	**74**	**$160**	**$11,840**	**80**	**$0**	**$12,130**	**0**	**$0**	**$0**	**0**	**$0**	**$0**
PROCUREMENT SUPPORT (RECURRING):													
CONTRACTOR ENGINEERING	$812			$0			$0			$0			$0
GOVERNMENT IN-HOUSE	$7,288			$1,777			$1,601			$0			$0
DOCUMENTATION	$466			$0			$0			$0			$0
GOVERNMENT TEST	$2,139			$0			$0			$0			$0
TOTAL RECURRING	**$10,705**			**$1,777**			**$1,601**			**$0**			**$0**
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	$12,693			$0			$0			$0			$0
CONTRACTOR ENGINEERING	$0			$0			$0			$0			
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			$0
TOTAL NONRECURRING	**$12,693**			**$0**			**$0**			**$0**			**$0**
TOTAL FLYAWAY	**$73,554**	**74**	**$184**	**$13,617**	**80**	**$172**	**$13,731**	**0**	**$0**	**$0**	**0**	**$0**	**$0**
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$0			$0			$0			$0			$0
INSTALL & CHECKOUT	$0			$0			$0			$0			$0
SPECIAL HANDLING EQUIPMENT	$0			$0			$0			$0			$0
FLEET TEST EQUIPMENT	$0			$0			$0			$0			$0
TRAINING DEVICES	$24			$0			$0			$0			$0
DOCUMENTATION	$0			$199			$0			$0			$0
ILS	$784			$0			$0			$0			$0
TOTAL GRD EQUIP/FLEET SUP COST	**$808**			**$199**			**$0**			**$0**			**$0**
WEAPONS SYSTEM COST	**$74,362**	**74**	**$187**	**$13,816**	**80**	**$172**	**$13,731**	**0**	**$0**	**$0**	**0**	**$0**	**$0**
VARIOUS 1/	**$182,967**												
TARGETS INITIAL SPARES	$0			$0			$0			$0			$0
TOTAL PROGRAM COST	**$257,329**	**74**	**$187**	**$13,816**	**80**	**$172**	**$13,731**	**0**	**$0**	**$0**	**0**	**$0**	**$0**

P-1 SHOPPING LIST

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

A. DATE February 2003

B. APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2; Other Missiles

C. P-1 ITEM NOMENCLATURE
DRONES AND DECOYS

SUBHEAD
J2DJ

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
ADM-141C/FY01	56	160	NAVAIR	N/A	SS/FP	Ramat Hasaron, IS Israeli Military Industries	DEC 02	JAN 04	Yes	N/A
ADM-141C/FY02	74	160	NAVAIR	N/A	SS/FP	Ramat Hasharon, IS Israeli Military Industries,	DEC 02	MAR 04	Yes	N/A
ADM-141C/FY03	80	149	NAVAIR	N/A	SS/FP	Ramat Hasharon, IS Israeli Military Industries,	JUN 03	AUG 04	Yes	N/A

D. REMARKS

FY 2003 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 Other Missiles**			Weapon System		P-1 ITEM NOMENCLATURE **DRONES AND DECOYS (J2DJ)**	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
ADM-14C/IMI	IMI, Ramat Hasharon, IS (ITALD)	2	10	20			13		13	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADM-141C/IMI	01	N	56	0	56															A										56
ADM-141C/IMI	02	N	74	0	74															A										74
ADM-141C/IMI	03	N	80	0	80																					A				80

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADM-141-C/IMI	01	N	56	0	56				20	20	16																			0
ADM-141-C/IMI	02	N	74	0	74						4	20	20	20	10															0
ADM-141-C/IMI	03	N	80	0	80											16	20	20	20	4										0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**					P-1 ITEM NOMENCLATURE **Other Missile Support(A2FD) BLI: 229000**							
Program Element for Code B Items:					Other Related Program Elements							
	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	0		0	0	0	0	0	0	0	0	0	0
COST ($M)	$59.8		$9.6	$11.8	$10.9	$10.5	$10.6	$9.6	$9.8	$10.0	$0.0	$142.6
Initial Spares ($M)	$2.4		$0.8	$0.7	$0.6	$0.7	$0.9	$0.6	$0.5	$0.5	$0.0	$7.6

The MK-41 Vertical Launching System (VLS) is a surface combatant missile launching system, designed to store, select and launch various STANDARD Missile configurations, TOMAHAWK, Tactical TOMAHAWK, EVOLVED SEASPARROW (ESSM) and Vertical Launch ASROC (VLA) missiles. The MK-41 VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapon systems. Current configurations are: two 61 cell launchers, forward and aft, for 22 TICONDEROGA (CG 47) Class Cruisers beginning with CG-52; one 61 cell launcher forward for 10* SPRUANCE (DD 963) Class Destroyers; one 61 cell aft and one 29 cell launcher forward for 28 ARLEIGH BURKE (DDG 51) Class Destroyers; and one 64 cell launcher aft and one 32 cell launcher forward for 32 DDG 51 FLT IIA ships.

WPN funds ILS support and initial training support for MK-41 VLS canisters and canister support equipment. WPN is required for Engineering Change Proposal (ECP) and Ordnance Alteration (ORDALT) development, procurement, installation, production support, technical documentation, canister and gas management hardware. Additionally, funding is required for: training in support of new missile variants (ESSM, and Tactical TOMAHAWK); providing MK-41 VLS unique equipment to the weapon facilities; and providing ILS for various canisters and gas management configurations.

In FY01 and prior, MK-41 VLS canisters were funded under MK-41 VLS BLI 2290 for STANDARD Missile variants and TOMAHAWK. Beginning in FY-02, canisters are budgeted with the End Item under STANDARD Missile BLI 2234 and TOMAHAWK BLI 2101. The EVOLVED SEASPARROW Missile (ESSM) with Quad Pack (ESSM/QP) canisters were budgeted beginning in FY-01 Procurement under EVOLVED SEASPARROW (ESSM) BLI 2307. Budgeting with the End Item is now consistent across all missile types.

* 14 SPRUANCE (DD 963) Class Ships are being decommissioned through FY-03 bringing the total to 10 DD-963's.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **FEBRUARY 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Other Missile Support(A2FD) BLI: 229000**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 2001 and Prior	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FD009	CANISTER EQUIPMENT					1,927			4,305			3,770			3,294
FD970	ILS SUPPORT					7,261			7,154			7,121			7,187
FD980	INITIAL TRAINING SUPPORT					374			349			52			0
						9,562			**11,808**			**10,943**			**10,481**

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21					DATE FEBRUARY 2003					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**			Weapon System		P-1 ITEM NOMENCLATURE **Other Missile Suppot (A2FD) BLI: 229000**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
TYPE I and TYPE II Canisters	United Defense, L.P.	120	330	480	3	3	18	18	21	E
	Minneapolis, Mn									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MK-13 (SM-2 BLK III/IIIA/IIIB)	01		75	0	75					8	8	8	8	8	8	8	8	11												0
MK-21 MOD 1 (SM-2 BLK IV/IVA)	01		15	0	15							4	4	4	3															0
MK-25 MOD 0 (ESSM/QP)	01		9	0	9													3	3	3										0
																														0
																														0
																														0
																														0
																														0
																														0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
																														0
																														0
																														0
																														0
																														0
																														0
																														0
																														0

Remarks: Minimum Sustaining Rates are met with Navy Acquisition and Direct Commercial Sale (DCS) quantities.
ESSM/QP (MK-25 MOD 0) Qty shown for informational Purposes.

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA - 2 Other Missiles							P-1 ITEM NOMENCLATURE AIM-9 Sidewinder Mods					
Program Element for Code B Items:							Other Related Program Elements **0207161N**					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)	73.679		0.792	0.583	0.0	0.0	0.0	0.0	$0.0	$0.0		$75.054

The AIM-9 Sidewinder short-range air-to-air missile (SRM) is a launch and leave, air combat munitions that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the SRM arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures.

Modifications to the AIM-9M to incorporate changes to ensure compatibility with F/A-18E/F are funded through FY03.

FY 2002 Program Justification: Correction of forward hangar failures between AIM-9M and F/A18 E/F.
FY 2003 Program Justification: Correction of forward hangar failures between AIM-9M and F/A18 E/F.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy

P-1 ITEM NOMENCLATURE
HARM Mods - AGM-88C/D/E (Subhead: J2ES)

Program Element for Code B Items:
232700

Other Related Program Elements
0205601N

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	To Complete	Total Program
QUANTITY												0
COST ($M)			$0.0	$4.9	$7.8	$8.0	$8.2	$8.4	$24.8	$42.4	$600.8	$705.3
Initial Spares ($M)												$0.0
Total ($M)			$0.0	$4.9	$7.8	$8.0	$8.2	$8.4	$24.8	$42.4	$600.8	$705.3
Unit Cost ($M)			$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	

MISSION DESCRIPTION: The High Speed Anti-Radiation Missile (HARM) is a joint-service air-to-service missile designed to suppress or destroy land and sea based radars involved with enemy air defense systems. HARM is integrated on the F/A-18 and EA-6B aircraft. HARM weighs 807 lbs, is 164 inches long and 10 inches in diameter. HARM is a joint-service program with USN (lead), USAF, and FMS participation. The HARM was in full production from FY1982 through FY1996. The USN procured 8,654 all-up-round (AUR) HARMs and 551 Block IV missile modification kits with WPN funding. The last year of USN WPN funding was appropriated in FY94.

The HARM AGM-88B+/D (Block VI)/Precision Navigation Unit (PNU) Upgrade Program is a tri-national cooperative program that will enable the fleet to maintain effectiveness against increasingly sophisticated, ground-based enemy radars. The Block VI/PNU consists of a tactical software upgrade in conjunction with a hardware upgrade which includes the installation of an Inertial Measurement Unit (IMU) coupled with a Global Positioning System (GPS) receiver to provide improved guidance capability to current domestic and international customer inventories. The AGM-88B+/D (Block VI) is in development and will start production in FY03. A Low Rate Initial Production decision is planned for Apr 03 with LRIP contract award to follow in May 03. Milestone III is projected for December 03. Full Rate Production begins FY2004.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY**		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **HARM Mods - AGM-88D/E Subhead: J2ES BLI 232700**												
			TOTAL COST IN THOUSANDS OF DOLLARS												
COST CODE	ELEMENT OF COST	ID Code	Prior Years*	FY 2002			FY 2003			FY 2004			FY2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Modification Kits and Configurations to Upgrade HARM AGM-88B/C to D/E														
N/A	AGM-88D HARM PNU Mod Kits	N/A					60	0.061	3.648	127	0.061	7.722	129	0.061	7.843
	Production Support Costs								1.215			0.065			0.157
	Subtotal								4.863			7.787			8.000
	TOTAL		**-**			**-**			**4.863**			**7.787**			**8.000**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy	C. P-1 ITEM NOMENCLATURE: HARM Mods - AGM-88D/E (232070)	SUBHEAD: J2ES

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
AGM-88D HARM PNU Mod Kits										
FY2003	60	0.061	NAVAIR	DEC 02	FFP	RAYTHEON TUCSON, AZ	MAY 03	NOV 04		
FY2004	127	0.061	NAVAIR	DEC 03 - OPTION 2	FFP	RAYTHEON TUCSON, AZ	JAN 04	JAN 05		
FY2005	129	0.061	NAVAIR	DEC 04- OPTION 3	FFP	RAYTHEON TUCSON, AZ	JAN 05	JAN 06		

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED** **February 2003**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AGM-88B and AGM-88C TYPE MODIFICATION: HARM AGM88D UPGRADE MODIFICATION TITLE: HARM Mods-AGM-88D (Subhead: J2ES)

DESCRIPTION/JUSTIFICATION:

The High speed Anti-Radiation Missile (HARM) is the USN weapon of choice against ground-based enemy radar emitters. The current HARM configuration is the AGM-88C, however the AGM-88D configuration is in development and will enter production in FY2003. The AGM-88D builds upon the AGM-88C configuration and will enhance fleet ability to suppress threats in both a reactive and preplanned fashion, increase probability of kill, extend launch range, provide GPS based point-to-point capability/geographic specificity, improve effectiveness against low power radar transmitters, practically eliminate friendly fire, and improve HARMs effectiveness in closely confined battle situations such as those experienced during Kosovo Operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Low Rate Initial Production Contract Award

LRIP Contract Award: MAY 03

	Prior Yea		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete	TOTAL	
	QTY	$	QTY	$	QTY	$													$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E (HARM Improvement)				11.592		3.807		2.013		1.749		3.697		3.706		3.828		3.839			34.231
PROCUREMENT																					
INSTALLATION KITS					60	3.648	127	7.722	129	7.843	131	7.965	132	8.026						579	35.203
INSTALLATION KITS - UNIT COST						0.061		0.061		0.061		0.061		0.061							
INSTALLATION KITS NONRECURRING																					0.000
COMPONENTS INTEGRAL TO AUR BUILD-UP (ES010)						0.062		0.000		0.000		0.000		0.000							0.062
PRODUCTION MGMT SUPPORT						0.176		0.034		0.091		0.048		0.033							0.382
EQUIPMENT NONRECURRING						0.066															0.066
ENGINEERING CHANGE ORDERS AND CONFIG MGMT						0.041		0.000		0.000		0.000		0.000							0.041
TRAINING EQUIPMENT																					0.000
SUPPORT EQUIPMENT						0.075		0.000		0.000		0.000		0.000							0.075
Gov't In-House PRODUCTION AND ENGINEERING SUPP						0.622		0.000		0.000		0.000		0.000							0.622
GOVT TEST PROGRAM - TELEMETRY						0.041		0.000		0.000		0.000		0.000							0.041
INTEGRATED LOGISTICS SUPPORT						0.081		0.031		0.004		0.002		0.003							0.121
TECHNICAL DOCUMENTATION						0.041		0.000		0.000		0.000		0.000							0.041
JMPS																					0.000
TRANSPORTATION						0.010		0.000		0.002		0.001		0.002							0.015
INTERIM CONTRACTOR SUPPORT																					0.000
INSTALL COST/ALL-UP-ROUND BUILD-UP*						0.000		0.000		0.060		0.180		0.339							0.579
TOTAL PROCUREMENT			0	0.0	60	4.863		7.787		8.000		8.196		8.403						579	37.249

* Installation of the retrofit kits into missile control and guidance sections will be accomplished by Raytheon Systems Company (RSC). Field activity will perform All-Up-Round (AUR) breakdown/build-up.

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **AGM-88B** MODIFICATION TITLE: **HARM Mods-AGM-88D (Subhead: J2ES)**

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Contractor Assembly at Plant 18 Mos for LRIP
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Mos for Full Rate Production

CONTRACT DATES:	FY 2002 Not applicable	FY 2003 MAY 03	FY 2004 JAN 04	FY 2005 JAN 05
DELIVERY DATE:	FY 2002 Not applicable	FY 2003 NOV 04	FY 2004 JAN 05	FY 2005 JAN 06

($ in Millions)

Cost:	FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007 *		FY 2008		FY 2009				Total	
			Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																				
FY 2003 EQUIPMENT							60	0.06												
FY 2004 EQUIPMENT									180	0.180										
FY 2005 EQUIPMENT											120	0.120								
FY 2006 EQUIPMENT											120	0.120								
FY 2007 EQUIPMENT											99	0.099								
FY 2008 EQUIPMENT																				
FY 2009 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003 1	2	3	4	FY 2004 1	2	3	4	FY 2005 1	2	3	4	FY 2006 1	2	3	4	FY 2007 1	2	3	4	FY 2008 1	2	3	4	FY 2009 1	2	3	4	TC	TOTAL
In	0	0	0	0	0	0	0	0	0	10	15	45	46	38	33	31	33	33	32	33	33	33	32	33	33	35	31	0	0	0	579
Out	0	0	0	0	0	0	0	0	0	0	0	60	0	60	60	0	60	0	60	0	60	0	60	60	0	60	39	0	0	0	579

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2

P-1 ITEM NOMENCLATURE
STANDARD MISSILE MODIFICATION (A2FK) BLI:235600

Program Element for Code B Items:

Other Related Program Elements

	FY2001 and Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	467		58	89	80	79	79	79	80	70	19	1,100
COST ($M)	$242.4		$34.9	$55.1	$50.8	$51.9	$53.2	$54.2	$55.4	$49.6	$13.6	$661.1
Initial Spares ($M)												$0.0

PROGRAM OVERVIEW: The STANDARD Missile Modification Program modifies SM-2 BLK II and III missile into SM-2 BLK IIIB missiles. The program makes improvements in the operational readiness and electronic countermeasures performance of the missiles. These modifications are "turnkey" and do not involve separate install funding.

NOTE: No ERF,D funding.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **STANDARD MISSILE MODIFICATION (A2FK) BLI:235600**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	2001 & Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FK007	GC&A			58	408.47	23,691	89	462.85	41,194	80	438.13	35,050	79	451.13	35,639
	MK 104 UPGRADE			58	53.71	3,115	89	55.24	4,916	80	56.21	4,497	79	57.22	4,521
	MK 54 S&A DEVICE			58	9.11	528	89	10.12	901	80	10.29	823	79	10.48	828
	MK 45 TDD MOD 9/MOD 14 *			58	110.50	6,409	Var **	Var **	6,301	80	110.50	8,840	79	118.00	9,322
	MK 125			58	19.72	1,144	89	19.96	1,776	80	20.32	1,626	79	20.70	1,636
			242,373			**34,887**			**55,088**			**50,836**			**51,946**

* Beginning in FY05 the MK 45 TDD will transition from General Dynamics (formerly Motorola) to Raytheon (Mod 14).
** FY03 MK 45 TDD cost includes a mix of TDD assembly kits and new TDDs. Excess TDDs in inventory were utilized with assembly kits.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy/BA-2	C. P-1 ITEM NOMENCLATURE: STANDARD MISSILE MODIFICATION BLI: 235600	SUBHEAD: A2FK

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
GC&A										
FY02	58	408.47	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	07/02	01/04	YES	
FY03	89	462.85	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	12/02	01/05	YES	
FY04	80	438.13	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	01/04	01/06	YES	
FY05	79	451.13	NAVSEA		SS/FFP/IF	RAYCO - Tucson, AZ	01/05	01/07	YES	
MK 104 UPGRADE										
FY02	58	53.71	NAVSEA		SS/FFP	ARC - Camden, AR	08/02	10/03	YES	
FY03	89	55.24	NAVSEA		SS/FFP	ARC - Camden, AR	03/03	10/04	YES	
FY04	80	56.21	NAVSEA		SS/FFP	ARC - Camden, AR	03/04	10/05	YES	
FY05	79	57.22	NAVSEA		SS/FFP	ARC - Camden, AR	03/05	10/06	YES	
MK 54 S&A DEVICE										
FY02	58	9.11	NAVSEA		SS/FFP	KAMAN - Middletown,CT	08/02	10/03	YES	
FY03	89	10.12	NAVSEA		SS/FFP	KAMAN - Middletown,CT	03/03	10/04	YES	
FY04	80	10.29	NAVSEA		SS/FFP	KAMAN - Middletown,CT	03/04	10/05	YES	
FY05	79	10.48	NAVSEA		SS/FFP	KAMAN - Middletown,CT	03/05	10/06	YES	
MK 45 TDD										
FY02 MOD 9	58	110.50	NAVSEA		MYP/SS/FFP	GD - Scottsdale,AZ	04/02	10/03	YES	
FY03 MOD 9	Various *	Various *	NAVSEA		MYP/SS/FFP	GD - Scottsdale,AZ	12/02	10/04	YES	
FY04 MOD 9	80	110.50	NAVSEA		MYP/SS/FFP	GD - Scottsdale,AZ	03/04	10/05	YES	
FY05 MOD 14 **	79	118.00	NAVSEA		SS/FFP/AF	RAYCO-Tuscon, AZ	03/05	10/06	YES	
MK 125 WARHEAD										
FY02	58	19.72	NAVSEA		SS/FFP	AlliantTech - Magna,UT	08/02	10/03	YES	
FY03	89	19.96	NAVSEA		SS/FFP	AlliantTech - Magna,UT	04/03	10/04	YES	
FY04	80	20.32	NAVSEA		SS/FFP	AlliantTech - Magna,UT	04/04	10/05	YES	
FY05	79	20.70	NAVSEA		SS/FFP	AlliantTech - Magna,UT	04/05	10/06	YES	

D. REMARKS

* FY03 MK 45 TDD cost includes a mix of TDD assembly kits and new TDDs. Excess TDDs in inventory were utilized with assembly kits.

** Beginning in FY05 the MK 45 TDD will transition from General Dynamics (formerly Motorola) to Raytheon (Mod 14).

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2003					
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT NAVY/BA2**				Weapon System		P-1 ITEM NOMENCLATURE **STANDARD MISSILE MODIFICATION BLI: 235600**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA	
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA	
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA	
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004									
						CY 2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	2000		74	45	29	7	2	0	0	0	10	10																
RAYCO	2001		80	0	80								10	10	10	10	10	10	10	10									
RAYCO	2002		58	0	58																3	4	5	5	6	6	6	6	5	12
RAYCO	2003		89	0	89																									89
RAYCO	2004		80	0	80																									80
RAYCO	2005		79	0	79																									79
RAYCO	2006		79	0	79																									79
RAYCO	2007		79	0	79																									79
	2008		80	0	80																									80

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2005												FISCAL YEAR 2006									
						CY 2004			CALENDAR YEAR 2005										CALENDAR YEAR 2006									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
RAYCO	2002		58	46	12	5	4	3																					
RAYCO	2003		89	0	89				7	7	7	7	8	8	8	8	8	7	7	7									
RAYCO	2004		80	0	80																7	7	6	7	7	7	7	7	6	19
RAYCO	2005		79	0	79																									79
RAYCO	2006		79	0	79																									79
RAYCO	2007		79	0	79																									79
RAYCO	2008		80	0	80																									80
RAYCO	2009		70	0	70																									70

Remarks: * These components are also on the SM-2 Block IIIB missile (BLI 223400). The production rates apply to both STANDARD Missile BLI 223400 and STANDARD Missile Modifications BLI 235600 components.

FY 2004/05 BUDGET PRODUCTION SCHEDULE, P-21			DATE February 2003								
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT NAVY/BA2**		Weapon System	P-1 ITEM NOMENCLATURE **STANDARD MISSILE MODIFICATION BLI: 235600**								
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA	
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA	
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA	
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2007												FISCAL YEAR 2008									BAL
						CY 2006			CALENDAR YEAR 2007									CALENDAR YEAR 2008									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RAYCO	2004		80	61	19	7	6	6																					
RAYCO	2005		79	0	79				7	7	6	7	7	6	7	7	6	7	6	6									
RAYCO	2006		79	0	79																7	7	6	7	7	6	7	7	6	19
RAYCO	2007		79	0	79																									79
RAYCO	2008		80	0	80																									80
RAYCO	2009		70	0	70																									70

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2009												FISCAL YEAR 2010									BAL
						CY 2008			CALENDAR YEAR 2009									CALENDAR YEAR 2010									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RAYCO	2006		79	60	19	7	6	6																					
RAYCO	2007		79	0	79				7	7	6	7	7	6	7	7	6	7	6	6									
RAYCO	2008		80	0	80																7	7	6	7	7	6	7	7	6	20
RAYCO	2009		70	0	70																									70

Remarks: * These components are also on the SM-2 Block IIIB missile (BLI 223400). The production rates apply to both STANDARD Missile BLI 223400 and STANDARD Missile Modifications BLI 235600 components.

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy BA 2 - Other Missiles**							P-1 ITEM NOMENCLATURE **Weapons Industrial Facilities (BLI: 242000)**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)	**$85.4**		**$35.7**	**$17.3**	**$7.4**	**$4.1**	**$4.1**	**$4.2**	**$4.3**	**$4.4**		

The following items are funded in this line:

1. NAVAIR - Close, deactivate, prepare for disposal, and convey the two Government-owned contractor-operated (GOCO), Naval Weapons Industrial Reserve Plants (NWIRPs) under the cognizance of NAVAIR supported by WPN funds. The two facilities are NWIRP, McGregor TX and NWIRP, Toledo OH. Closure and deactivation is being accomplished in accordance with 41 CFR, Chapter 101, Federal Property Management Regulations, and other applicable guidance. Upon completion of divestiture there will no longer be a requirement to fund these facilities.
-Accomplish environmental remediation as required by law in accordance with Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Executive Order 12898, Environmental Justice. CERCLA 120(h) requires assurance of environmental contamination remediation prior to disposal of Government real property. This assurance is provided by following guidance promulgated by ASSTSECNAV (I&E) memo of 22 December 1993, Application of BRAC Environmental Procedures to Non-BRAC Identification of Uncontaminated Property and Cleanup of Contaminated Property at Closing Installations.
-Develop Environmental Impact Statements (EISs) and conduct Cultural Resource Serveys as required by law. The EISs and Cultural Resource Surveys must be accomplished in accordance with 40 CFR, the National Environmental Policy Act (NEPA) and other applicable guidance. The NEPA process is required for any major Federal action affecting the environment. Application to GOCO divestures was confirmed by NAVAIR Counsel in letter serial AIR-7.7.4/REC of 3 April 95, which based its conclusion on OPNAVINST 5090.1B, the Defense Authorization Acts of 1994 and 1995, and case law.
-Dispose of the facilities as required by law. NWIRP, McGregor TX is being accomplished in accordance with Section 2868, Land Conveyance, NWIRP, McGregor, TX of Public Law 104-106, National Defense Authorization Act for FY-1996. The mandatory divestiture of NWIRP, Toledo OH will be accomplished in accordance with ASSTSECNAV (RD&A) memo of 7 July 1995, 41 CFR, Chapter 101, Federal Property Management Regulations and other applicable guidance.
-Accomplish explosive decontamination of NWIRP, McGregor TX in accordance with AMCCOMR 385-2, Decontamination and Disposal of Facilities, Equipment and Material and other applicable guidance prior to transfer of the facility to the city of McGregor as required by law.

2. NAVSEA - Close, deactivate, prepare for disposal, and convey the Government-owned contractor operated (GOCO), Naval Weapons Industrial Reserve Plant (NWIRP) Bedford, MA under the cognizance of NAVSEA supported by WPN funds.
- Supports Capital Type Rehabilitation projects at two GOCO plants, Naval Industrial Reserve Ordnance Plant (NIROP) Allegany Ballistics Laboratory (ABL), WV and NIROP Fridley, MN. NIROP ABL supports weapons systems such as Sparrow, ESSM, ERGM, AIM-9X, Ramjet, AGS, Tomahawk GG and Trident GG. NIROP Fridley supports weapons systems such as VLS Mk 41, VLS Canisters, Mk 45 Mod 4, and AGS. Federal Acquisition Regulation Part 52.245-7 specifies that Facilities Use contracts require that the government fund capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will limit capabilities to maintain scheduled production rates and overall productivity. Funding is separated to reflect environmental, safety, major repair, energy conservation and facilities restoration.

(CONTINUED ON PAGE 2 OF 2)

BUDGET ITEM JUSTIFICATION SHEET P-40									DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy BA 2 - Other Missiles**							P-1 ITEM NOMENCLATURE **Weapons Industrial Facilities (BLI 242000)**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)	**$85.4**		**$35.7**	**$17.3**	**$7.4**	**$4.1**	**$4.1**	**$4.2**	**$4.3**	**$4.4**		

(CONTINUED FROM PAGE 1 of 2)

- ENVIRONMENTAL: Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations. These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.
- SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations. These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.
- MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.
- ENERGY CONSERVATION: Provides funds to decrease energy consumption by installing new energy efficient systems and provides increased maintenance on these systems. Mandated in 1993 by Congress (Defense Appropriations Committee).
-FACILITIES RESTORATION: Provides funds for replacement of Weapons Industrial Facilities at NIROP ABL in Rocket Center, WV that have exceeded their useful life and deteriorated beyond safe operations.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Weapons Industrial Facilities (BLI: 242000)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FU002	Capital Type Rehabilitation														
	Environmental					3,200			3,065			3,123			3,215
	Safety					0			0			0			0
	Energy Conservation					961			1,023			794			863
	Major Repairs					0						0			0
FU005	Facilities Restoration (ABL)					28,054			9,690			0			0
FU020	Government-Owned Contractor-Operated Facilities Divestiture														
	NWIRP McGregor					3,057			2,966			3,414			0
	NWIRP Toledo					470			580			112			0
	Various/		85446												
			85,446			35,742			17,324			7,443			4,078

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (Total Cost in Millions $)								DATE		February 2003
APPROPRIATION/BUDGET ACTIVITY WP,N - BA2 OTHER MISSILES					P-1 ITEM NOMENCLATURE Fleet Satellite Communications Follow-On 2433				SUBHEAD 52EU	
	PY	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL
QUANTITY	11				1	1	1	1	1	4	9
COST (in millions)	2,101.7	76.8			362.3	482.8	496.4	571.8	550.4	2,198.6	4,662.2

PROGRAM COVERAGE: The Ultra High Frequency (UHF) Follow-On communications satellite constellation satisfies DoD worldwide UHF communications requirements. The current constellation is expected to drop below the required availability of 70% by 2008. The funding in FY05 will provide for the procurement and related costs for the first of nine Mobile User Objective System (MUOS) satellites (notional constellation design) with Initial Operational Capability (IOC) in 2008 and Full Operational Capability (FOC) in 2013.

Note: The "Total" and "To Completion" amounts include MUOS costs only (starting from FY2005).

COST ANALYSIS																**DATE** February 2003
APPROPRIATION ACTIVITY WP,N - BA-2 OTHER MISSILES								**P-1 ITEM NOMENCLATURE** Fleet Satellite Communications Follow-On 2433								**SUBHEAD** 52EU
			TOTAL COST IN THOUSANDS OF DOLLARS													
			PY		**FY 2002**			**FY 2003**			**FY 2004**			**FY 2005**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**TOTAL COST**	**QTY**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
4200	Satellite Procurement		2,100,528	11			0									
4300	Launch Services						76,190									
4400	Production Support		1,220				623									
4500	MUOS Procurement													1		362,255
	Total Control		2,101,748				76,813			0			0			362,255

PROCUREMENT HISTORY AND PLANNING

A. DATE

B. APPROPRIATION/BUDGET ACTIVITY
WP,N - BA2 OTHER MISSILES

C. P-1 ITEM NOMENCLATURE
Fleet Satellite Communications Follow-On 2433

SUBHEAD
52EU

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST Delevery	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
4200	Satellite Procurement	FY01	Boeing Satellite Systems Inc	SS/FFP	SPAWAR	Aug-98	Dec-00	Dec-03	1	93,500	Yes	N/A
4500	MUOS Satellite Procurement	FY05	TBD	TBD**	SPAWAR	TBD	TBD	TBD	1	362,255	No	N/A

D. REMARKS

** Option to FY04 SD&D contract.

Exhibit P-40, Budget Item Justification											Date February 2003	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Weapons Procurement, Navy/2/250000											P-1 Line Item Nomenclature Ordnance Support Equipment	
Program Element for Code B Items:					Other Related Program Elements							
	ID Code	Prior Years	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (=P-1)												
Initial Spares												
Total Proc Cost			4.154	5.318	15.361	61.833	40.958	47.921	49.140	9.874	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Description THE DETAILS FOR THIS LINE ITEM ARE HELD AT A HIGHER CLASSIFICATION LEVEL.												

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/Torpedoes & Related Equipment, BA-3

P-1 ITEM NOMENCLATURE
ASW TARGETS LI#314100

Program Element for Code B Items:
0204229N

Other Related Program Elements

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QTY MODS MK-39/2	N/A	A	500	500	500	1,000	1,000	1,000	1,000	1,000	N/A	N/A
QTY MODS MK-30/2	N/A	B	N/A	N/A	8	8	8	8	9	9	N/A	N/A
COST ($M)	$24.9		$9.9	$4.2	$25.5	$28.4	$28.9	$29.3	$29.7	$30.3	Cont.	Cont.
Initial Spares ($M)	$0.8		$0.5	$0.6	$1.0	$0.9	$1.0	$1.0	$0.9	$0.0	Cont.	Cont.
TOTAL ($M)	$25.7		$10.4	$4.8	$26.5	$29.3	$29.9	$30.3	$30.7	$30.3	Cont.	Cont.
Unit Cost ($M)												

ITEM DESCRIPTION/JUSTIFICATION:
This line item includes two distinct systems : (a) MK 39 Mod 2 (Cost Codes TG002, TG832, TG842, TG852, TG862 and TG900) and (b) MK30 Mod 2 (Cost Codes TG005, TG015, TG835, TG865 , TG875, TG885, TG900 and TG905).

The MK 39 Mod 2 Expendable Mobile ASW Training Target (EMATT) is a small self-propelled underwater vehicle launchable from fixed wing and rotary wing ASW aircraft and ASW surface ships for the purpose of providing basic, open ocean sonar training and MK 46, MK 48, ADCAP and MK 50 placement exercises. Its operation consists of a dynamic run trajectory that is actively controlled in depth and course with pre-programmable run maneuvers and is capable of generating a magnetic field (anomaly) detectable by all current Navy Magnetic Anomaly Detectors (MAD).

The MK 30 Mod 2 is the next generation fleet ASW training target for training the Navy surface ship, submarines and aircraft that will be capable of simulating the Russian and Rest of the World (ROW) submarine threats anticipated in the twenty-first century littoral warfare environment. Replacing the aging MK 30 Mod 1 target, MK 30 Mod 2 will be a highly reliable and maintainable unmanned undersea vehicle simulating the dynamics, acoustics and magnetic signature of submarines and act as a target for ASW sensors and torpedoes to detect, classify, track and pursue in a realistic training environment. The FY 2003 program is for non-recurring engineering associated with hardware obsolesence. MK 30 Mod 2 production begins in FY 2004.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3: Torpedo and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Targets/73TG**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N76														
TG002	MK39 Mod 2 - EMATT	A	17,477	500	4.61	2,305	500	4.05	2,025	500	3.83	1,915	1,000	3.89	3,890
TG832	Prod Eng (In-house)	A	4,493			602			556			564			702
TG842	Quality Assurance	A	357			0			45			45			60
TG862	Acceptance T & E	A	452			0			56			55			55
TG900	Consulting Services	A	999			59			100			107			163
	Total MK39 Mod 1/2 - EMATT	A	23,778			2,966			2,782			2,686			4,870
	N78														
TG005	MK30 Mod 2	B	460			0			0	8	2,388	19,104	8	2,422	19,376
TG015	MK30 Mod 2 Support Equipment	B	0			15			0			1,254			1,545
TG835	Production Engineering (In-house)	B	532			723			0			1,868			1,917
TG885	Site Installation and Checkout	B	20			634			0			0			100
TG900	Consulting Services	B	135			280			0			120			120
TG905	Production Engineering (Contractor)	B	0			5,313			1,465			500			500
	Total MK30 Mod 2	B	1,147			6,965			1,465			22,846			23,558
			24,925			**9,931**			**4,247**			**25,532**			**28,428**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy BA-3:Torpedo and Related Equipment	ASW Targets	73TG

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2002										
MK39 Mod 2 - EMATT/ECPs	500	4.61	NAVSEA	Jan-01	C/FFP	Sippican, Inc. Marion, MA	May-02	Jul-03	Yes	NA
FY2003										
MK39 Mod 2 - EMATT/ECPs	500	4.05	NAVSEA	N/A	C/FFP-Option	Sippican, Inc. Marion, MA	Feb-03	Feb-04	Yes	NA
FY2004										
MK39 Mod 2 - EMATT/ECPs	500	3.83	NAVSEA	N/A	C/FFP-Option	Sippican, Inc. Marion, MA	Feb-04	Feb-05	Yes	NA
MK30 Mod 2	8	2,388	NAVSEA	Oct-03	C/FFP	TBD	Mar-04	Sep-05	Yes	NA
FY2005										
MK39 Mod 2 - EMATT/ECPs	1,000	3.89	NAVSEA	NA	C/FFP-Option	Sippican, Inc. Marion, MA	Feb-05	Feb-06	Yes	NA
MK30 Mod 2	8	2,422	NAVSEA	NA	C/FFP-Option	TBD	Nov-04	May-06	Yes	NA

D. REMARKS

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21						DATE	February 2003
APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy **BA-3:Torpedo and Related Equipment**			Weapon System	P-1 ITEM NOMENCLATURE **ASW Targets/73TG**			
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	2-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
ASW Targets - MK39 Mod2	Sippican, Inc.	###	600	1000	0	5	16	12	18	
	Marion, MA									
			1-8-5							
ASW Targets - MK30 Mod 2	Raytheon	3	12	20	1	6	18	18	24	
	Portsmouth, RI									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
																													0
																													0
MK39 Mod2 Sippican, Inc.	2002		500	0	500								A															12	488
MK39 Mod2 Sippican, Inc.	2003		500	0	500																A								500

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MK39 Mod2 Sippican, Inc.	2002		500	12	488			38		150		150		150															0
MK39 Mod2 Sippican, Inc.	2003		500	0	500					166		166		168															0
MK39 Mod2 Sippican, Inc.	2004		500	0	500					A												166		166		168			0
MK39 Mod2 Sippican, Inc.	2005		1000	0	1000																	A							1000
MK 30 Mod 2/TBD	2004		8	0	8						A																	1	7
MK 30 Mod 2/TBD	2005		8	0	8														A										8

Remarks:

FY 2004 BUDGET PRODUCTION SCHEDULE, P-21					DATE	February 2003				
APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy **BA-3:Torpedo and Related Equipment**			Weapon System		P-1 ITEM NOMENCLATURE **ASW Targets/73TG**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	2-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
ASW Targets - MK39 Mod2	Sippican, Inc.	150	600	1000	0	4	16	12	18	
	Marion, MA									
			1-8-5							
ASW Targets - MK30 Mod 2	Raytheon	3	12	20	1	6	18	18	24	
	Portsmouth, RI									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005			CALENDAR YEAR 2006										CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MK39 Mod2 Sippican, Inc.	2005		1000	0	1000					200		200		200		200		200											0
MK 30 Mod 2/TBD	2004		8	1	7	1	1	1	1	1	1	1																	0
MK 30 Mod 2/TBD	2005		8	0	8								1	1	1	1	1	1	1	1									0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009										BAL
						2007			CALENDAR YEAR 2008										CALENDAR YEAR 2009										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3

P-1 ITEM NOMENCLATURE
Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500

Program Element for Code B Items:
0204228N

Other Related Program Elements
0604610N Lightweight Torpedo Development

	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total* Program
QUANTITY		B	0	42	36	94	198	220	310	349	cont.	1,266
COST ($M)			$9.8	$38.0	$34.2	$61.6	$76.9	$96.6	$115.8	$128.6	cont.	$561.5
Initial Spares ($M)			$0.6	$1.6	$1.3	$2.3	$4.3	$3.2	$4.1	$4.5	cont.	$21.9

ITEM DESCRIPTION/JUSTIFICATION:

The MK54 Mod 0 Lightweight Torpedo , is a modular evolution building from the MK46 and MK50 torpedo. It is comprised of the MK50 sonar, MK46 warhead and propulsion system and new COTS processors which will use tactical software derived from MK50 and MK48 ADCAP. The MK54 will provide improved performance against diesel electric submarine threats operating in shallow water. This budget includes the procurement of upgrade kits for VLA compatibility.

The total Lightweight torpedo inventory is composed of a mix of MK46 5A(S), MK46 5A(SW), MK50, and MK54.

Performance Spec Milestone: June 1996

Technical Data Package: March 2002

DTE: July 1999 - October 2002

OPEVAL: March 2003 - November 2003

*Includes 17 units from FY00.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo MK46 Mods/MK54 /Mod 0, H3F5, LI# 321500

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 2001 and Prior	FY 2002 **			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F5104	Hardware	B		0		6,049	42	610	25,607	36	672	24,179	94	480	45,095
F5105	Fleet Exercise Systems					0			483			545			746
F5107	MK54/VLA Flight & Integration					0			0			0			600
F5003	Support Equipment					472			2,801			791			5,235
F5830	Production Engineering-In-house					3,021			2,249			2,300			2,353
F5860	Accept. Test & Evaluation					0			6,303			5,824			6,995
F5900	Production Engineering-Contractor					235			597			610			624
						9,777			**38,040**			**34,249**			**61,648**

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P-1 SHOPPING LIST

ITEM NO. 23 PAGE NO. 2

CLASSIFICATION:

UNCLASSIFIED

** No LWT procurement in FY02. Funding for TI and engineering services.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003
B. APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy**	C. P-1 ITEM NOMENCLATURE: **Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500**	SUBHEAD: **H3F5**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MK 54 Mod 0/ 2003	42	610	NAVSEA	n/a	SS/FP	Raytheon, Keyport, WA	Feb-03	Jun-04		
MK 54 Mod 0/ 2004	36	672	NAVSEA	n/a	C/FP	TBD	Dec-03	Jul-05		
MK 54 Mod 0/ 2005	94	480	NAVSEA	n/a	option	TBD	Dec-04	Jul-06		

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-3 Torpedo and Related Equipment

P-1 ITEM NOMENCLATURE
MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: H3D1

Program Element for Code B Items:
0204284N

Other Related Program Elements
0205632N Heavyweight Torpedo Development

	Fy2001 & Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY MODS		A	35	105	76	78	0	0	0	0	0	294
QUANITY CBASS		B	0	0	15	15	84	106	136	142	765	1,263
COST ($M)			$41.6	$60.9	$60.4	$61.9	$62.9	$64.0	$65.5	$66.7	$479.1	$963.0
Initial Spares ($M)			$2.9	$3.0	$6.7	$7.3	$6.3	$4.6	$3.8	$3.8	CONT.	$38.3

ITEM DESCRIPTION/JUSTIFICATION:

This line item procures Modification Kits for the MK48 ADCAP Torpedo. The MK48 ADCAP MODS program incorporates both a Guidance and Control (G&C) modification and a Torpedo Propulsion Upgrade (TPU) modification to the baseline ADCAP system.

The G&C Modification addresses the need to increase memory and processing capacity of the G&C hardware and to replace obsolete and sunset technology electronic component parts. The increased capacity is required for future advanced signal processing techniques that will be needed for performance upgrades in shallow water target detection/classification. The TPU addresses the Navy's operational requirement for a quieter ADCAP torpedo. These modifications will allow the MK48 ADCAP torpedo to operate effectively in adverse environments, thus enabling the MK48 ADCAP torpedo to counter enemy submarine threats into the 21st century.

The Common Broadband Advanced Sonar System (CBASS), starting in FY04 with the purchase of 15 LRIP units, will incorporate into the ADCAP MODs torpedo a new wide band sonar system and software algorithms. These new elements will provide the capability to transmit and receive over a wide frequency band to take advantage of broadband signal processing techniques. These improvements are necessary to introduce current and future improvements in advanced threat countermeasures capabilities. All FY06 and FY07 CBASS units include the procurement of the Torpedo Propulsion Upgrade, required for compatibility with the Guidance and Control modifications. This results in a higher unit cost in those years.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3 Torpedo and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: H3D1**

COST CODE	ELEMENT OF COST	ID Code	FY 2002			FY 2003			FY 2004			FY 2005		
			Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
D1001	ADCAP MODS	A	35	553	19,345	105	265	27,838	76	343	26,046	78	346	26,977
	CBASS								15	533	7,989	15	499	7,481
	(Contractor, Installation, ECP, TI)													
D1003	Support and Ancillary Equipment				1,869			8,043			3,116			3,187
D1830	Production Engineering				11,854			12,811			13,110			13,378
	(Contractor and In House)													
D1860	Acceptance T&E				8,549			12,242			10,111			10,870
	(Contractor and In House)													
					41,617			**60,934**			**60,372**			**61,893**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy BA-3 Torpedo and Related Equipment	MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: H3D	H3D1

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY02 MK48 MOD6	35	553	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	11/01	8/03		
FY03 MK48 MOD6	105	265	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	11/02	5/04		
FY04 MK48 MOD6	76	343	NAVSEA	07/03	C/FP	TBD	11/03	8/05		
FY04 CBASS	15	533	NAVSEA	07/03	C/FP	TBD	11/03	4/05		
FY05 MK48 MOD6	78	346	NAVSEA	N/A	C/FP (option)	TBD	11/04	8/06		
FY05 CBASS	15	499	NAVSEA	07/04	C/FP (option)	TBD	11/04	4/06		

D. REMARKS

Unit cost reflected in this budget includes install cost from prior year buys.
The quantity installed in any given year is different from the procurement quantity.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy BA-3: Torpedoes and Related Equipment

P-1 ITEM NOMENCLATURE
QUICKSTRIKE/323100/73QS

Program Element for Code B Items:

Other Related Program Elements
204304N

	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												
COST ($M)	$1.9	A	$3.8	$2.0	$3.2	$3.0	$3.1	$3.1	$3.2	$13.9	CONT.	CONT.
Initial Spares ($M)	$0.0	A	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	CONT.	CONT.

PROGRAM DESCRIPTION/JUSTIFICATION:

The QUICKSTRIKE family of mines consists of the MK-62 and MK-63 (500 lb. and 1000 lb. Mines) based on MK-82 and MK-83 general purpose bombs respectively, and the MK-65 (2000 lb.) mine. The Mod 0, 1, and 3 variants utilize various target detection devices (TDD). QUICKSTRIKE (QS) Mod 3 utilizes a newly developed TDD, MK-71. The MK-71 is a software-programmable device that is capable of being programmed to optimize detection of new threats. The QS Mod 3 consists of Target Detection Devices (including the service and dummy MK-71), Safe/Arming devices (including the service MK 75, practice MK 81, and dummy MK 84), and battery (including the MK 176). Additional support hardware include Test Sets MK-650 and MK-11, Adapters MK 157 and MK 163, and miscellaneous parts kits. The 2010 Mine is being developed beginning in FY 2003 as a replacement for the Mine MK-56, designated to be removed from service beginning in FY 2010.

Note: FY02 funding for Target Detection Device includes non-recurring costs for production line startup, 5 first article units, and first article testing.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS
P-40a

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy, BA-3: Torpedoes and Related Equipment

P-1 ITEM NOMENCLATURE
QUICKSTRIKE/323100/73QS

Procurement Items	ID Code	Prior Years	FY 2002	FY 2003	FY 2004	FY 2005					To Complete	Total
Service TDD Mk71												
Quantities		**0**	**21***	**0**	**37**	**65**						
Funding		**0**	**2500**	**0**	**651**	**1231**					**Cont.**	**Cont.**
Training TDDs												
Quantities		**160**	**0**	**0**	**0**	**0**						
Funding		**48**	**0**	**0**	**0**	**0**					**N/A**	**48**
Batteries												
Quantities		**0**	**0**	**0**	**37**	**65**						
Funding		**0**	**0**	**0**	**78**	**126**					**Cont.**	**Cont.**
Service S&A Mk 75												
Quantities		**0**	**0**	**0**	**37**	**65**						
Funding		**0**	**0**	**0**	**555**	**975**					**Cont.**	**Cont.**
Training S&A Mk 84												
Quantities		**160**	**0**	**0**	**0**	**0**						
Funding		**64**	**0**	**0**	**0**	**0**					**N/A**	**64**
Training S&A Mk 81		**0**	**0**	**0**	**0**	**0**					**N/A**	**50**
Support Hardware		**500**	**58**	**700**	**180**	**50**					**N/A**	**1488**
Quality Assurance		**0**	**157**	**229**	**217**	**100**					**Cont.**	**Cont.**
Production Engineering		**527**	**397**	**324**	**408**	**397**					**Cont.**	**Cont.**
Software Engineering		**793**	**650**	**0**	**994**	**110**					**Cont.**	**Cont.**
Acceptance T&E		**0**	**66**	**733**	**127**	**30**					**Cont.**	**Cont.**
Total Funding		**1884**	**3828**	**1986**	**3210**	**3019**						

*TDDs in FY02 are First Article Units

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-3 Torpedo and Related Equipment

P-1 ITEM NOMENCLATURE
Torpedo Support Equipment BLI: 330100 SBHD: H3F8

Program Element for Code B Items:

Other Related Program Elements

	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												
COST ($M)	CONT.		$29.5	$24.7	$24.9	$23.8	$42.2	$27.2	$30.8	$28.7	CONT.	CONT.
Initial Spares ($M)			$0.6	$0.6	$0.4	$0.5	$0.6	$0.4	$0.3	$0.4	CONT.	CONT.

The Torpedo Support Equipment account procures various torpedo components required to ready weapons for Surface Ships, Sub-Surface, Fixed Wing, and Rotary to achieve and maintain a readiness posture sufficient to counter the enemy sub-surface threat. The objective of this line is to provide the Fleet with ready exercise weapons for conducting training maneuvers which involve actually firing the torpedoes, and to maintain warshot inventories in an operational ready-for-issue status in support of combat ready deployment by anti-submarine warfare forces. After a torpedo is fired during a training exercise it is recovered and all expendable components such as batteries, cables, igniters (as well as various accessories required for air-launched torpedoes), must be replaced. These items as well as components such as exercise heads, fuel tanks, and exhaust valves which may be used more than onetime, but which are worn out or lost in service, are procured each fiscal year in quantities dependent upon the Fleet training requirements and tempo of operations. The torpedoes requiring support are the MK46 Mod 5A(S), MK46 Mod 5A(SW), MK 48 Mod 4, 5, and 6, MK 50, MK 54 and their associated Support and Test Equipment (S&TE). This equipment includes the following: lead droppers, seawater batteries, pressure cylinders, REXTORP kits, sway brace pads, suspension bands, thermal batteries, boiler assemblies, stop squibs, shutdown valves, gas injection assemblies, tailnuts, air stabilizers, wire coils, flex hoses, otto fuel, igniters, propellant, umbilical cables, and containers. In addition to components procurement, this account provides for production support and test/evaluation for these components and procurement of product improvement hardware and related equipment.

FY06 increases Torepdo Proficiency (Issue 28125) to procure Torpedo Support Equipment necessary to increase MK 48 ADCAP exercise torpedo firings as requested by Commander Naval Submarine Forces and approved by N77. The significant increase is necessary to provide 4T COG items for the increased firing requirements.

FY07 - 09 increases Torepdo Proficiency (Issue 28125) to procure Torpedo Support Equipment necessary for continued support of increased MK 48 ADCAP exercise torpedo firings as requested by Commander Naval Submarine Forces and approved by N77.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3 Torpedo and Other Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Torpedo Support Equipment BLI: 330100 SBHD: H3F8**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			FY 2001 and Prior	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F8001	Lightweight Support Equipment					5,944			269			704			770
F8002	Other Equipment Investment					3,832			3,409			3,318			2,122
F8830	Production Engineering - In House					1,495			1,683			1,635			1,645
F8840	Quality Assurance					69			50			72			73
F8860	Acceptance T & E					1,821			425			435			437
F8900	Production Engineering - Contractor					176			180			183			187
Total	Lightweight Total					**13,337**			**6,016**			**6,347**			**5,234**
F8100	Exercise and Expendables and Component Replacement					6,890			6,296			8,346			8,083
F8101	Other Equipment Investment					6,690			9,387			6,916			6,924
F8833	Production Engineering (In-house)					1,298			1,631			1,819			1,873
F8843	Quality Assurance					392			400			589			632
F8863	Acceptance Test and Evaluation					323			220			226			359
F8893	Production Engineering - Contractor					550			700			700			700
Total	Heavyweight Total					**16,143**			**18,634**			**18,596**			**18,571**
						29,480			**24,650**			**24,943**			**23,805**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy **BA-3 Torpedo Support Equipment**	**Torpedo Support Equipment**	**H3F8**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2002										
MK78 Mod 1Suspension Band	633	0.527	FISC	11/01	RC/FFP	United Terex, Norristown, PA	6/02	10/02	Yes	
MK46 Pressure Cylinder (Long)	122	0.285	FISC	9/01	RC/FFP	Applied Companies, Valencia, CA	4/02	11/02	Yes	
MK46 MK31 Air Stabilizer	392	0.766	FISC	11/01	RC/FFP	United Terex, Norristown, PA	5/02	11/02	Yes	
MK46 REXTORP Kits	200	0.100	NUWC, Keyport	Option	RC/FFP	Team Keyport Services, Poulsbo WA	7/02	11/02	Yes	
MK50 Thermal Battery	125	1.844	NAVSEA	Option	RC/FFP	Aerospatiale Batteries, France	7/02	9/02	Yes	
MK50 MEL Boiler	168	29.886	NAVSEA	8/01	PR/FFP	Hamilton Sundstrand, Rockford IL	3/02	5/02	Yes	
Torpedo Wire Coil	690	2.865	FISC	11/01	RC/FFP	Entwistle, Hudson, MA	4/02	1/03	Yes	
Sub Wire Coil	600	2.018	FISC	Option	RC/FFP	Entwistle, Hudson, MA	5/02	1/03	Yes	
Flex Hose (Improved)	649	1.080	NAVSEA	Option	RC/FFP	Cortland Cable Co, Cortland, NY	6/02	1/03	Yes	
Igniter	200	0.146	FISC	Option	RC/FFP	Quantic, Hollister, CA	5/02	1/03	Yes	
Otto Fuel	140	17.470	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	1/02	2/02	Yes	
MK62-1 A-Cable Recepticle	500	1.000	FISC	11/01	RC/FFP	SEACON Phoenix, Westerly, R.I.	5/02	1/03	Yes	
MK62-1 A-Cable Insert	296	0.088	FISC	Option	RC/FFP	General Reliance Inc., Denville NJ	5/02	12/03	Yes	
FY2003										
MK50 MK33 Air Stabilizer	80	2.300	NAVSEA	Option	PR/FFP	Paranetics Technology Inc, San Diego, CA	3/03	1/04	Yes	
MK50 REXTORP Kit	300	0.100	NUWC, Keyport	Option	WX/FFP	Team Keyport Services, Poulsbo WA	3/03	8/03	Yes	
Universal REXTORP	4	14.857	NUWC, Keyport	11/02	WX/FFP	Team Keyport Services, Poulsbo WA	3/03	1/04	No	3/03
Torpedo Wire Coil	679	2.950	NAVSEA	Option	PR/FFP	Entwistle, Hudson, MA	3/03	1/04	Yes	
Sub Wire Coil	399	2.099	NAVSEA	Option	PR/FFP	Entwistle, Hudson, MA	3/03	1/04	Yes	
Flex Hose (Improved)	865	1.036	NAVSEA	Option	PR/FFP	Cortland Cable Co, Cortland, NY	1/03	12/03	Yes	
Otto Fuel	140	15.940	NSWC Indian Head	Option	WX	NSWC Indian Head, MD	1/03	2/03	Yes	
Igniter	600	0.151	NAVSEA	Option	PR/FFP	Quantic, Hollister, CA	3/03	1/04	Yes	
MK62-1 A-Cable Recepticle	120	1.213	NAVSEA	Option	PR/FFP	SEACON Phoenix, Westerly, R.I.	3/03	1/04	Yes	
MK62-1 A-Cable Insert	1000	0.092	NAVSEA	Option	PR/FFP	General Reliance Inc., Denville NJ	3/03	1/04	Yes	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy **BA 3 - Torpedoes and Related Equipment**

P-1 ITEM NOMENCLATURE
ASW Range Support BLI: 330200 SBHD: 83F4/73F4

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												
COST ($M)			$ 18.997	$ 16.946	$ 12.811	$ 12.933	$ 13.090	$ 13.352	$ 13.570	$ 13.803	Continuing	Continuing
Initial Spares ($M)												

The ASW Range support program provides training range equipment, weapon proofing range equipment, and Fleet support equipment for use on the Navy's underwater ranges. This equipment is used to instrument Fleet exercises and torpedo firings, ASW readiness assessment and ASW weapon production acceptance testing. The Weapon Fleet training ranges supported are Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC) and Atlantic Fleet Weapons Training Facility (AFWTF). Test and Evaluation (T&E) ranges are Nanoose, Dabob Bay and Quinault.

F4001 - Pinger Exercise Components are placed in weapons and other underwater vehicles for tracking during training and T&E exercises, and to insure safe operation and movement of all craft and weapons on the ranges. In addition, pinger components are also procured to support the future Shallow Water Training Ranges at both coasts and Hawaii.

F4003 - Recovery Equipment is used on T&E ranges for recovering weapons on or buried in the sea floor. Approximately $10 million of hardware is recovered each year using these devices.

F4004 - The T&E Range Equipment line provides for improvement and modernization of range equipment for YTT (Yard Torpedo Tender) and test crafts; portable tracking range components used at remote sites for testing requirements in different sea-bottom, littoral and cold water environments; and other range systems in support of weapon T&E operations.

F4005 - The ASW Target MK 30 Mod 1 provides essential fleet ASW training on the Navy's underwater tracking ranges. The MK 30 Mod 1 is currently used at the BARSTUR - Hawaii, AUTEC- Bahamas, AFWTF - St. Croix, Virgin Islands and SCORE. ASW range support funds are used to procure components for the MK 30 that are consumed/expended during fleet in-water runs. These funds are also used to replace obsolete components and improve maintenance and reliability of the targets.

F4006 - The stationary target components include the MK 28 Targets, and T&E Targets.
MK 28 Targets are used for conducting Service Weapons Test (SWT) on in-service and advanced warshot torpedoes. The SWT is the only test the Navy has to verify the explosive chain of torpedoes. Funding is used to procure target systems and components expended during SWT operations in addition to improvement and modernization projects.
The T&E targets include the MK 69, a bottom mounted stationary target, and Over-the-side (OTS), a surface deployed target, used to test various weapon attributes during T&E exercises. These targets are needed to fill specific technical requirements for the MK 48 ADCAP, MK 50 and MK54 torpedo upgrades. Funding is used to procure components that improve operability and maintenance of the target.

F4007 - This is a Congressional plus-up to support the Northwest Range Complex that provides the test resources for acceptance testing for USW system acquisition. Funding will provide for upgrade/refurbishment of existing range systems that are required to keep the Range Complex viable. The major systems that require upgrade/refurbishment are: Range Craft and Craft Systems, Fire Control and Instrumentation, and Engineering and display systems.

Production Engineering funds support efforts performed by a field activity or contractor during the production phase of these projects.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA 3 - Torpedoes and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Range Support BLI: 330200 SBHD: 83F4**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N76														
F4001	Pinger Exercise Components					295			248			251			290
F4003	Recovery Equipment					57			39			30			26
F4004	Test & Evaluation Range Equipment					290			262			280			246
F4005	MK 30 Components					238			275			280			286
F4006	Stationary Target Components					146			143			153			159
F4007	NW Range Upgrade					389			311			0			0
F4830	Production Engineering In-House					249			232			239			244
F4850	Product Improvement					242			161			166			171
F4900	Production Engineering - Contractors					21			19			11			12
	N77														
F4001	Pinger Exercise Components					2076			1,860			1884			2,166
F4003	Recovery Equipment					406			285			220			188
F4004	Test & Evaluation Range Equipment					2137			1,947			2085			1,826
F4005	MK30 Components					1575			2,079			2132			2,150
F4006	Stationary Target Components					1051			1,055			1132			1,170
F4007	NW Range Upgrade					2463			1,970			0			0
F4830	Production Engineering In-House					1855			1,735			1765			1,799
F4850	Product Improvement					1819			1,199			1224			1,244
F4900	Production Engineering - Contractors					154			142			82			94
	N78														
F4001	Pinger Exercise Components					178			157			149			152
F4003	Recovery Equipment					35			24			19			16
F4004	Test & Evaluation Range Equipment					183			158			174			154
F4005	MK 30 Components					843			980			172			172
F4006	Stationary Target Components					90			92			99			102
F4007	NW Range Upgrade					648			519			0			0
F4830	Production Engineering In-House					716			613			150			152
F4850	Product Improvement					741			400			104			105
F4900	Production Engineering - Contractors					60			41			10			9
F4DEF	DEFERRAL														
	N6														
F4001	Pinger Exercise Components					40			0			0			0
						18,997			**16,946**			**12,811**			**12,933**

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA 3 - Torpedoes and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Range Support BLI: 330200 SBHD: 83F4**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N76														
F4001	Pinger Exercise Components					295			248			251			290
F4003	Recovery Equipment					57			39			30			26
F4004	Test & Evaluation Range Equipment					290			262			280			246
F4005	MK 30 Components														
F4006	Stationary Target Components					146			143			153			159
F4007	NW Range Upgrade					389			311			0			0
F4830	Production Engineering In-House					75			74			76			79
F4850	Product Improvement					60			60			62			63
F4900	Production Engineering - Contractors					10			11			2			2
	N77														
F4001	Pinger Exercise Components					2076			1,860			1884			2,166
F4003	Recovery Equipment					406			285			220			188
F4004	Test & Evaluation Range Equipment					2137			1,947			2085			1,826
F4005	MK30 Components														
F4006	Stationary Target Components					1051			1,055			1132			1,170
F4007	NW Range Upgrade					2463			1,970			0			0
F4830	Production Engineering In-House					536			545			557			580
F4850	Product Improvement					434			443			454			467
F4900	Production Engineering - Contractors					71			82			22			32
	N78														
F4001	Pinger Exercise Components					178			157			149			152
F4003	Recovery Equipment					35			24			19			16
F4004	Test & Evaluation Range Equipment					183			158			174			154
F4005	MK 30 Components														
F4006	Stationary Target Components					90			92			99			102
F4007	NW Range Upgrade					648			519			0			0
F4830	Production Engineering In-House					46			46			47			49
F4850	Product Improvement					37			38			39			40
F4900	Production Engineering - Contractors					18			17			3			3
F4DEF	DEFERRAL														
	N6														
F4001	Pinger Exercise Components					24			0			0			0
						11,755			**10,386**			**7,738**			**7,810**

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA 3 - Torpedoes and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Range Support BLI: 330200 SBHD: 73F4**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost						
	N76														
F4001	Pinger Exercise Components														
F4003	Recovery Equipment														
F4004	Test & Evaluation Range Equipment														
F4005	MK 30 Components					238			275			280			286
F4006	Stationary Target Components														
F4830	Production Engineering In-House					174			158			163			165
F4850	Product Improvement					182			101			104			108
F4900	Production Engineering - Contractors					11			8			9			10
	N77														
F4001	Pinger Exercise Components														
F4003	Recovery Equipment														
F4004	Test & Evaluation Range Equipment														
F4005	MK30 Components					1575			2,079			2132			2,150
F4006	Stationary Target Components														
F4007	NW Range Upgrade														
F4830	Production Engineering In-House					1319			1,190			1208			1,219
F4850	Product Improvement					1385			756			770			777
F4900	Production Engineering - Contractors					83			60			60			62
	N78														
F4001	Pinger Exercise Components														
F4003	Recovery Equipment														
F4004	Test & Evaluation Range Equipment														
F4005	MK 30 Components					843			980			172			172
F4006	Stationary Target Components														
F4830	Production Engineering In-House					670			567			103			103
F4850	Product Improvement					704			362			65			65
F4900	Production Engineering - Contractors					42			24			7			6
	N6														
F4005	MK30 Components					16			0			0			0
SUBTOTAL						**7,242**			**6,560**			**5,073**			**5,123**
TOTAL						**18,997**			**16,946**			**12,811**			**12,933**

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA - 3 Torpedoes and Related Equipment**			P-1 ITEM NOMENCLATURE **BLI 2410** **FIRST DESTINATION TRANSPORTATION (FDT) / 93TA**					
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
COST (In Millions)	2.8	2.7	2.8	3.1	3.2	3.3	3.3	3.4

First Destination Transportation (FDT) provides for the movement of newly procured equipment and material from the contractor's plant to the initial point of receipt for subsequent shipment to its destination.

WEAPONS SYSTEM COST ANALYSIS

P-5

DATE: February 2003

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy
BA 3 Torpedoes and Related Equipment

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
TA001	First Destination Transportation			2,764		2,698		2,776		3,131

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4: OTHER WEAPONS								P-1 ITEM NOMENCLATURE/LINE ITEM # SMALL ARMS AND WEAPONS - BLI #412900 24E3					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	N/A			$0.9	$6.7	$4.2	$2.2	$7.0	$2.3	$2.3	$2.3		$27.9
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

Quantities of weapons procured with the above funding are to meet small arms allowances and inventory objectives. This line item provides for initial issue procurement, modernization, standardization and stock replenishment procurement of a wide variety of small arms and weapons (caliber .50 and below), including required gun mounts and associated support components. The line also provides for procurement of sufficient types and quantities of weapons to support training, security afloat and shore missions of approximately 2,495 ship/ashore activities Navy-wide.

Items procured include, but are not limited to, M240/Mk-46/Mk-19/.50 Cal Machines guns, Mk-82 Sniper Rifles, M16A3 Rifles, M727 Carbines, 12 Gauge Shotguns, M11 Pistols, Mk-82/93/95/97 Mounts, and other related weapons and equipment for Naval Mobile Construction Batalions, Naval Construction Force Support Units, Construction Battalion Maintenance Units and Mobile Security Force. This line item also procures .50 Cal Machine Guns and Mounts for the DDG AT/FP Improvement Program.

Non-Add:
FY 2002 DERF: Provided $10M for procurement of Physical Security Equipment, including equipment for Mobile Security Forces. This includes: M240B and M240N Machine Guns, MK46 Lightweight Machine Guns, M4 Machine Guns, Mk-19 Grenade Launchers, M82 Sniper Rifles, 12Ga Shotguns, M11 Pistols, M4A1 Rifles, gun mounts,

	FY 2002	FY 2003	FY 2004	FY 2005
Funding Totals	**$896**	**$6,724**	**$4,240**	**$2,239**
Non-Add: FY 2002 DERF	**$10,000**			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET **P-40**											DATE: **FEBRUARY 2003**	
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCURMENT, NAVY/BA-4**							P-1 ITEM NOMENCLATURE **Coast Guard Weapons/BLI 420600**					
Program Element for Code B Items:							Other Related Program Elements					
	FY2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	To Complete	Total
QUANTITY												
COST (In Millions)				**$0.0**	**$0.0**	**$5.4**	**$5.4**	**$5.4**	**$5.4**	**$5.4**	**CONT.**	**CONT.**
SPARES COST (In Millions)												

MISSION DESCRIPTION AND BUDGET JUSTIFICATION:

The Coast Guard Weapons line funds the Coast Guard requirement for Combat System Suites for new construction ships under the Coast Guard Integrated Deepwater System Replacement Project. Under inter-service agreement (delineated in OPNAVINST 4000.79A), DON provides the combat, detection, and electronic systems required for the Coast Guard to integrate with the Navy in times of war and conflict. Ship Construction costs are funded under the Department of Transportation appropriation.

Combat System Suite procured must complement and integrate with future Navy Combat Systems. The suite is an appropriate balance of equipment to ensure the Coast Guard is prepared to accomplish its assigned Naval Warfare Tasks in concert with U.S. Navy units. The Combat Systems Suite will be aligned with future Naval ship building programs to support commonality among the two Services' systems and meet National Fleet objectives.

The Deepwater Combat Suites will include the following:

Weapons Systems - Provides gun, missile and fire control systems to engage surface and air threats, including the capability to fire warning shots, disabling fire and achieve mission kill against anticipated threats.

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System											DATE: **Feb-03**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-4**			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **COAST GUARD WEAPONS BLI: 420600**										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 2001 and Prior	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
XXXXX	**DEEP WATER Combat Suites**														
	Weapons Systems		0.0			0.0			0.0			0.0			5,377
			$0.0			**$0.0**			**$0**			**$0.0**			**$5,377**

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy — BA-4: Other Weapons**							P-1 ITEM NOMENCLATURE: **Airborne Mine Neutralization System/422500/74S0**					
Program Element for Code B Items: **0604373N Airborne Mine Countermeasures**							Other Related Program Elements: **0204302N**					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)		B	$0.0	$0.7	$0.0	$0.0	$13.4	$26.4	$23.4	$23.9	CONT.	CONT.
SPARES COST (In Millions)			$0.0	$0.0	$0.0	$0.0	$0.2	$0.2	$1.1	$3.0	CONT.	CONT.

PROGRAM DESCRIPTION/JUSTIFICATION:

Airborne Mine Countermeasures (AMCM) Equipment is currently used by MH-53E helicopters to counter the threat of sea mines. The MH-60S helicopter will be adapted for the AMCM mission in support of the development of an Organic Fleet AMCM program. The equipment is divided into two broad categories -- minesweeping and minehunting. (1) Minesweeping is performed by mechanical or influence sweeps. In mechanical sweeping, the mine mooring is severed by the sweep gear allowing the mine to float to the surface where it is destroyed. In influence sweeping, a magnetic or acoustic field which simulates the magnetic/acoustic signature of a ship is introduced into the water. This field causes the mine mechanism to actuate. (2) In mine hunting, the object is to actually locate and classify minelike objects (usually by means of high resolution sonar) and mark or neutralize mines using explosive devices. AMCM squadrons currently have mechanical, magnetic, and acoustic sweeping capabilities, and mine surveillance and marking capabilities. Their mission is to locate, classify and neutralize moored and bottom mines.

Airborne Mine Neutralization System (AMNS) is composed of an Operator Control Subsystem and both a MK62 explosive or MK63 inert neutralizer subsystem deployed from the helicopter platform to reacquire, identify, and neutralize moored or proud bottom sea mines.

AMNS procurements will be funded by: OPN for the AMNS combat system. WPN for AMNS neutralizer program.

Rapid Airborne Mine Clearance System (RAMICS) program will satisfy the U.S. Navy's need for rapid mine clearance capability required to neutralize near-surface and surface (floating) moored sea mines. RAMICS will use geo-location data provided by other minehunting and mine reconnaissance systems, use a laser system to reacquire targets and to direct the fire of supercavitating projectiles that will render the mines inoperable. RAMICS includes the following major subsystems and components:

(a)Gun Subsystem
(b) MK258 Mod 1 ammunition
(c) Targeting Sensor Subsystem
(d) Fire Control Subsystem
(e) Software

The system will be deployed from the MH-60S helicopter and will provide organic airborne mine defense for Carrier Battle Groups (CVBG) and Amphibious Ready Groups (ARG). This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective area (AOA).

RAMICS procurements will be funded by: WPN for the RAMICS combat system. PANMC for RAMICS projectile ammunition program.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System											DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy — BA-4: Other Weapons			ID Code: B	P-1 ITEM NOMENCLATURE/SUBHEAD: Airborne Mine Neutralization System/422500/74S0										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
S0065	Unit Cost - AMNS Neutralizer	B					15	48.00	720						
	Subtotal					**0**			**720**			**0**			**0**

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: FEBRUARY 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-4**							P-1 ITEM NOMENCLATURE **4205** **MK-15 CLOSE-IN WEAPON SYSTEM (CIWS) MODS-24DT**					
Program Element for Code B Items:							Other Related Program Elements					
	FY 2001 and Prior	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY		A										
COST (M$)	**62.045**	A	**43.715**	**57.700**	**41.448**	**144.472**	**170.272**	**146.229**	**362.893**	**274.217**	**0.000**	**1302.991**
Initial Spares (M$)												

JUSTIFICATION:

PHALANX CLOSE-IN WEAPON SYSTEM (CIWS) is a high fire rate weapon system that automatically acquires, tracks, and destroys anti ship missiles (ASMS) that have penetrated all other ship's defenses.

CIWS BLOCK 1B: This is an upgrade/conversion to CIWS incorporating a stabilized Thermal Imager and an automatic acquisition video tracker that provides the additional capability to engage small, high speed, maneuvering surface craft and low, slow aircraft and helicopters. The Thermal Imager also improves performance against Anti-Ship Cruise Missiles by providing more accurate angle tracking information to the fire control Computer. CIWS Block 1B is scheduled to be installed on the following ship classes: AGFs, CVNs, DDGs, FFGs, LCCs, LHAs, LHDs, LPDs, LSDs, WHECs, and Trainers. The installations will be installed during a limited availability by Shipalt/AIT.

Block 1B Initial Spares are included as part of the CIWS IB procurement.

EQUIPMENT INSTALLATION: Funding is for the installation of equipment, including Fleet modernization program installs, and installation of equipment at shore facilities.

CLASSIFICATION: **UNCLASSIFIED** **FEBRUARY 2003**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: PHALANX CIWS BLOCK I TYPE MODIFICATION: UPGRADE MODIFICATION TITLE: UPGRADE AND CONVERSION

DESCRIPTION/JUSTIFICATION:

The BLOCK IB surface mode mount includes the addition of a thermal imager, an automatic acquisition video tracker, and a stabilization system for the tracker. The upgrade is essential to provide the fleet capability against small high speed surface threats and low slow speed air threats.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COMPLETE

	FY 2001&Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		40.300																				40.300
PROCUREMENT																						
CIWS BLOCK IB PROCUREMENT	26	49.767	4	12.039	7	20.829	7	16.395	39	80.958	39	96.938	37	77.649	68	200.633	43	116.046	0	0.000	270	671.254
CIWS BLOCK IB CONVERSION/UPGRAD	11		15	26.003	11	21.792	7	14.117	39	53.487	39	54.504	37	52.691	68	98.677	43	63.585	0	0.000	270	384.856
CIWS BLOCK IB INSTALLATION	9	2.978	2	0.356	3	0.671	13	1.459	10	2.976	5	1.554	39	7.887	39	6.073	105	18.013	45	0.000	270	41.967
TRAINER PROCUREMENT	2	4.200	0	0.000	1	2.672	1	1.718	1	1.750	3	6.469	0	0.000	0	0.000	0	0.000	0	0.000	8	16.809
TRAINER CONVERSION/UPGRADE	1		1	1.948	1	1.981	1	2.017	1	1.371	3	4.193	0	0.000	0	0.000	0	0.000	0	0.000	8	11.510
TRAINER INSTALLATION		0.000	1	0.050	0	0.000	1	0.052	1	0.053	1	0.054	1	0.055	3	0.167	0	0.000	0	0.000	8	0.431
OTHER (GRAY RADOMES)			60	0.407	60	0.488	60	0.497	60	0.506	60	0.516	50	0.438	0	0.000	0	0.000	0	0.000	350	2.852
PRODUCTION ENGINEERING SUPPORT		5.100		1.726	0	5.165	0	4.993	0	2.248	0	4.599	0	4.079	0	57.087	0	76.573	0	0.000	0	161.570
DSA SERVICES				1.186	0	4.102	0	0.200	0	1.123	0	1.445	0	3.430	0	0.256	0	0.000	0	0.000	0	11.742
TOTAL PROCUREMENT		62.045		43.715	0	57.700	0	41.448	0	144.472	0	170.272	0	146.229	0	362.893	0	274.217	0	0.000	278	1302.991

***DSA FUNDING FOR ALL SHIP CLASSES IS BUDGETED IN FY02/03 TO ALLOW FOR INSTALLATION ON ANY CLASS SHIP IN OUT YEARS.**

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTE **PHALANX CIWS BLOCK I** MODIFICATION TITLE: UPGRADE AND CONVERSION TO BLOCK IB

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Block IB Surface Mode will be accomplished through upgrade/conversion by OEM.**

ADMINISTRATIVE LEAD-TIME: 6 MONTHS PRODUCTION LEADTIME 22 MONTHS

CONTRACT DATES:	FY 2002: APR 2002	FY 2003: JAN 2003	FY 2004: JAN 2004	JAN 2005
DELIVERY DATE:	FY 2002: FEB 2003	FY 2003: NOV 2004	FY 2004: NOV 2005	NOV 2006

($ in Millions)

Cost:	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	9	2.978	2	0.356																	11	3.334
FY 2001 EQUIPMENT					3	0.671															3	0.671
FY 2002 EQUIPMENT				1.186			13	1.459													13	2.645
FY 2003 EQUIPMENT						4.102			10	2.976											10	7.078
FY 2004 EQUIPMENT								0.200			5	1.554									5	1.754
FY 2005 EQUIPMENT										1.123			39	7.887							39	9.010
FY 2006 EQUIPMENT												1.445			39	6.073					39	7.518
FY 2007 EQUIPMENT														3.430			37	6.350			37	9.780
FY 2008 EQUIPMENT																0.256	68	11.663			68	11.919
FY 2009 EQUIPMENT																						
TO COMPLETE																					45	
TOTAL		2.978		1.542		4.773		1.659		4.099		2.999		11.317		6.329		18.013			270	53.709

INSTALLATION SCHEDULE: Input=DELIVERY FROM OEM, Output=INSTALLATION ON SHIPS

	FY 2001	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				Y 20(	TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	4		
In	11	0	0	0	0	0	2	0	4	4	4	3	2	2	5	0	0	2	2	2	1	10	10	10	9	10	10	11	8	26	45	270
Out	9	0	1	1	0	0	0	1	2	2	4	4	3	2	3	3	2	1	1	2	1	10	10	10	9	10	10	11	8	28	45	270

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy / BA-4: OTHER WEAPONS

P-1 ITEM NOMENCLATURE
5"/54 GUN MOUNT MODS/BLI 421000

Program Element for Code B Items:

Other Related Program Elements

	2001 and Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												0
COST ($M)	$0.0		$26.4									
Initial Spares ($M)												

Note: In FY 2003 and out, reported under BLI 421700, Gun Mount Mods.

E5001 - 5" GUN MOUNT MODS: This element procures gun safety and shock hardening ORDALTs for 5" MK 45 gun mounts.

E5002 - MINOR CALIBER MODS: This element procures ORDALTs and miscellaneous equipment required to improve safety and reliability for the 25MM MK 38 Machine Gun System and all other minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacement of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK 11 saluting mounts and related components.

E5003 - 76MM GUN MOUNT MODS: This element procures safety/shock ORDALTs for 76MM MK 75 gun mounts. These ORDALTs will provide safety improvements for USN FFG 7 Class ships, USCG WMEC 270, and USCG WHEC 378 cutters.

E5004 - MK 45 MOD 4: This element procures modification kits to upgrade Mk 45 Mods 1 and 2 to Mod 4 configuration which includes Shock Test Rest requirements as well as the backfit of Extended Range Guided Munitions (ERGM) handling/loading capability on DDGs and land based units.

E5005 - CG CONVERSION MK 45 GUN MOUNT UPGRADE: This element procures modifications and associated technical and logistics support to upgrade MK 45 Gun Mounts to a Mod 4 configuration in support of the Cruiser Conversion Program. These modifications include: Gun Mount preparation, Mod 4 Kits, 5"/62 caliber Gun Barrels, Assembly and Test, and ERGM Handling Mechanism. The upgraded Gun Mount will be capable of firing Extended Range Guided Munitions and extend the range of ballistic ammunition.

E5006 - MK 38 GUN: This element procures MK 38 Gun Mounts.

E5007 - Force Protection Weapons: This element procures Force Protection Weapons.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/BA-4**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD: **5"/54 GUN MOUNT MODS/BLI 421000**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	2001 and Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
E5001	5" Gun Mount Mods		0			1,481									
E5002	Minor Caliber Mods		0			1,122									
E5003	76MM Gun Mount Mods		0			1,665									
E5004	MK 45 MOD 4		0			21,000									
E5005	CG Conversion MK 45 Gun Mount Upgrade		0			1,100									
E5006	MK 38 Gun		0			0									
E5007	Force Protection					0									
			0			**26,368**									

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy / BA-4: OTHER WEAPONS

P-1 ITEM NOMENCLATURE
BLI: 4217 GUN MOUNT MODS

Program Element for Code B Items:

Other Related Program Elements

	2001 and Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY												0
COST ($M)	$0.0			$11.5	$27.3	$26.4	$20.7	$15.3	$15.1	$18.5	**CONT**	**CONT**
Initial Spares ($M)												

Note: FY 02 reported under BLI 421000, 5"/54 Gun Mount Mods.

E5001 - 5" GUN MOUNT MODS: This element procures gun safety and shock hardening ORDALTs for 5" MK 45 gun mounts.

E5002 - MINOR CALIBER MODS: This element procures ORDALTs and miscellaneous equipment required to improve safety and reliability for the 25MM MK 38 Machine Gun System and all other minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacement of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK 11 saluting mounts and related components.

E5003 - 76MM GUN MOUNT MODS: This element procures safety/shock ORDALTs for 76MM MK 75 gun mounts. These ORDALTs will provide safety improvements for USN FFG 7 Class ships, USCG WMEC 270, and USCG WHEC 378 cutters.

E5004 - MK 45 MOD 4: This element procures modification kits to upgrade Mk 45 Mods 1 and 2 to Mod 4 configuration which includes Shock Test Rest requirements as well as the backfit of Extended Range Guided Munitions (ERGM) handling/loading capability on DDGs and land based units.

E5005 - CG CONVERSION MK 45 GUN MOUNT UPGRADE: This element procures modifications and associated technical and logistics support to upgrade MK 45 Gun Mounts to a Mod 4 configuration in support of the Cruiser Conversion Program. These modifications include: Gun Mount preparation, Mod 4 Kits, 5"/62 caliber Gun Barrels, Assembly and Test, and ERGM Handling Mechanism. The upgraded Gun Mount will be capable of firing Extended Range Guided Munitions and extend the range of ballistic ammunition.

E5006 - MK 38 GUN: This element procures MK 38 Gun Mounts.

E5007 - Force Protection Weapons: This element procures Force Protection Weapons.

NOTE: NO ERF,D FUNDS

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-4**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **GUN MOUNT MODS/4217 (14E5)**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	2001 and Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
E5001	5" Gun Mount Mods		0						5,159			1,348			6,459
E5002	Minor Caliber Mods		0						1,946			445			859
E5003	76MM Gun Mount Mods		0						2,590			0			0
E5004	MK 45 MOD 4		0						1,800			4,000			6,000
E5005	CG Conversion MK 45 Gun Mount Upgrade		0						0			0			0
E5006	MK 38 Gun		0						0	52	365.00	18,980	33	365	12,045
E5007	Force Protection								0			2,490			1,005
			0						**11,495**			**27,263**			**26,368**

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

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UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**							P-1 ITEM NOMENCLATURE **J4PN PIONEER PIP**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST (In Millions)			**N/A**	**8.828**	**13.622**	**8.798**	**1.953**	**1.951**	**1.987**	**2.023**		**39.162**

The Pioneer UAV System has provided near real-time intelligence, reconnaissance, and surveillance, for the Navy and Marine Corps, including video imagery for artillery , Naval Gunfire Support and battle damage assessment over land and sea. First deployed as a land-based system in 1986, Pioneer is configured to operate on LPD-4 class ships. The last Pioneer systems were procured in the Weapons Procurement, Navy appropriation and delivered in the early 1990's. The Pioneer is currently a key Unmanned Aerial Vehicle asset for the United States Marine Corps. The upgrades necessary to ensure the long-term viability of Pioneer for the Marine Corps are developed in the Pioneer Product Improvement Program (Research, Development, Test and Evaluation, Navy, PE 0305204N, Project A4012).

This line procures more capable Ground Control Stations and Launch and Recovery System Upgrades (including mobility enhancements such as down-sized trailer mounted launchers, HMMWV mounted Ground Control Stations, improved UAV transport trailers for transport and in-theater mobility), Tactical Data Link upgrades (including Tactical Control System and Tactical Control Data Link modifications for interoperability and data dissemination), Air Vehicle Upgrade Kits (including more capable EO/IR payloads, auxiliary fuel tanks, engine upgrades, and electrical power upgrades), and associated platform integration, production engineering and Integrated Logistics Support.

For Rapid system development and fielding, the PIP System is to be developed under a Rapid Deployment Capability (RDC) Authorization. The PIP addresses the critical issues facing the Pioneer system, including mobility, obsolescence, reliability, and interoperability, while improving performance by utilizing current technology and NDI components. The mobility enhancements consist of a HMMWV-mounted GCS, downsized launcher, and a UAV transport trailer. The GCS will utilize the TCS modified for Pioneer/Shadow control and the TCDL. The air vehicles will be upgraded for greater endurance, along with an electrical power management system upgrade. An improved EO/IR payload will be selected, procured, and integrated into the air vehicle.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **J4PN PIONEER PIP**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2002			FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	PIONEER IMPROVEMENT PROGRAM														
	Ground Control Station						1	2,100	2,100	2	2,100	4,200	1	2,100	2,100
	-PGCS									2	217	434	2	221	442
	-MRS									4	13	52			
	Launch & Recovery Systems														
	-Launchers						3	500	1,500						
	-A/V Transport Trailers						2	200	400	3	200	600			
	-GFE Trailers (HMMWV Trailers, etc.)						Var	Var	846	Var	Var	191			
	Tactical Control Data Links									10	63	630	30	63	1,863
	Air Vehicle Upgrades									10	150	1500	10	150	1500
	Payloads						10	135	1350	10	135	1350			
PN830	Production Engineering								1312			2128			1274
PN800	Integrated Logistics Support								1320			2537			1619
			0			**0**			**8,828**			**13,622**			**8.798**

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 35 PAGE NO. 002

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2003

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
WEAPONS PROCUREMENT, NAVY	PIONEER PIP	J4PN

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
FY2003										
GCS	1	2100	NAVAIR	3/03	Fixed Price	Northrop Grumman, CA	4/03	4/04		
Launchers	3	500	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	4/03	12/03		
A/V Transport Trailers	2	200	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	4/03	12/03		
Payloads	10	135	NAVAIR	12/02	Fixed Price	PUI, Hunt Valley, MD	1/03	2/03		
FY 2004										
GCS	2	2100	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	10/04		
PGCS	2	217	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	10/04		
MRS	4	13	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	4/04		
TCDL Upgrade Kits	10	63	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	10/04		
AV Upgrade Kits	10	150	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	4/04		
AV Transport Trailers	3	200	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/03	7/04		
Payloads	10	135	NAVAIR	12/03	Fixed Price	PUI, Hunt Valley, MD	1/04	2/04		
FY 2005										
GCS	1	2100	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/04	10/05		
PGCS	2	221	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/04	10/05		
TCDL Upgrade Kits	30	63	NAVAIR	3/03	Fixed Price	PUI, Hunt Valley, MD	11/04	4/05		
AV Upgrade Kits	10	150	NAVAIR	9/04	Fixed Price	PUI, Hunt Valley, MD	11/04	4/05		

D. REMARKS